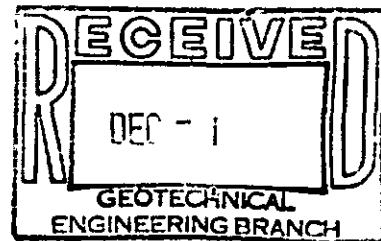




GEI Consultants, Inc.



**1997 INITIAL INCLINOMETER READINGS
BALL MOUNTAIN DAM
JAMAICA, VERMONT**

Submitted to:

**U.S. Army Corps of Engineers
New England District
424 Trapelo Road
Waltham, MA 02254-9149**

1021 Main Street
Winchester, MA 01890-1970
(781) 721-4000

November 1997
Project 97486

COPY 1 of 3

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Marco D. Boscardin

**Marco D. Boscardin, Ph.D., P.E.
Geotechnical Division Manager**

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Ball Mountain Dam - U.S. Army Corps of Engineers
November 1997**

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1. INTRODUCTION

1.1 Purpose

This report presents the initial readings taken by GEI Consultants Inc. of seven inclinometer casings installed in the downstream slope of Ball Mountain Dam in Jamaica, Vermont. The inclinometers were installed by U.S. Army Corps of Engineers, New England District (CENAE) during the summer and early fall of 1996.

1.2 Scope

The scope of work performed for this study was as follows:

- a) Take the initial readings of the seven inclinometer casings;
- b) Take spiral measurements of the seven inclinometer casings; and
- c) Prepare an engineering report containing initial inclinometer plots, tabular printouts of the inclinometer and spiral data, an Instrument Location Plan, and cross sections of the dam at inclinometer locations.

1.3 Authorization

This study was authorized by Sheila M. Winston-Vincuilla, Contracting Officer of the CENAE, under Delivery Order No. 0008 for Contract No. DACW 33-95-D-0008 dated August 19, 1997.

1.4 Project Personnel

The following personnel at GEI Consultants Inc. (GEI) conducted the field work, reduced the field data, and prepared this report:

Stephen J. Sarandis	Project Engineer
Marco D. Boscardin	Geotechnical Division Manager
Alton P. Davis, Jr.	Consultant

1.5 Project Datum

All elevations in this report refer to National Geodetic Vertical Datum. Horizontal coordinates are in Vermont State Grid System unless otherwise noted.

2. SITE AND PROJECT DESCRIPTION

Ball Mountain Dam is located on the West River in Jamaica, Vermont (Fig. 1). It is part of the Connecticut River Basin Flood Control Plan. The dam is located about 29 miles upstream of the confluence of the Connecticut and West Rivers in Brattleboro, Vermont. It is 9.5 miles upstream of the Townsend Lake Flood Control Dam. Construction of the dam was completed in 1961. The dam is owned and operated by the CENAE.

A plan of the dam is shown in Fig. 2. The dam is a rockfill and earthfill embankment with a concrete spillway and a low-level outlet tunnel in the right abutment. The embankment is 915 feet long and has a maximum height of 265 feet. The dam crest is about 20 feet wide and was originally constructed at El. 1052.0 feet NGVD. The downstream slope of the embankment is 1.75H:1V. The upstream slope of the embankment is 2H:1V above El. 1017 feet NGVD and 2.5H:1V below El. 1017 feet NGVD.

The embankment dam consists of a rolled, glacial-till core with riprap/rockfill protection on the upstream slope and a rockfill downstream shell. There are gravel filter transition layers between the core and the rockfill shells and between the downstream rockfill shell and the underlying foundation soils. To reduce seepage beneath the dam, there is a compacted, glacial-till, cutoff trench under the core extending to natural glacial till under the central portion of the dam and to bedrock under the abutments. In addition, there is a grout curtain in the bedrock in the abutments.

Relatively soon after construction, an apparent bulge was reported on the downstream slope about 175 feet down slope from the crest and extending the entire length of the dam. Photographs of the dam during construction indicate a haul road existed in the approximate location of the apparent bulge. It is likely the apparent bulge is simply an overbuild of the dam slope during haul road construction.

Portions of the downstream crest have reportedly settled up to 2 feet (1961-1985). The settlement areas were regraded with gravel during 1985-1986. Based on visual observations in 1992 and 1996, it appears that additional differential crest settlement is still occurring. A survey of monuments on the crest of the dam performed in the fall of 1996 indicate that the crest is now generally between EL. 1050.5 and 1051.5 feet NGVD, which is 0.5 to 1.5 feet below the design crest of the dam.

Six inclinometer casings were installed in the dam between October 1985 and January 1986 to monitor the observed embankment movements in the downstream shell. Inclinometer readings at each casing were started in April 1986. Results of readings obtained by GEI from April 1986 through December 1994 are presented in References 1 through 5. A discussion of the results of the inclinometer readings along with GEI's conclusions and recommendations is presented in Reference 5.

Seven new inclinometer casings were installed in the downstream slope of the dam between June 1996 and September 1996 to better define embankment movements. Installation details and survey information of the seven new inclinometer casings are presented in References 6 and 7. GEI conducted the initial readings for the seven new inclinometer casings in August 1997.

3. FIELD MEASUREMENTS

3.1 General

GEI conducted the initial readings of seven inclinometer casings from August 20 through August 23, 1997. The locations of the seven inclinometer casings are shown on an Inclinometer Location Plan presented as Fig. 2. Daily Field Reports and Inclinometer Monitoring Forms are presented in Appendix D. The Weekly Safety Meeting report is presented in Appendix E.

3.2 Inclinometer Equipment

The SINCO Digitilt Inclinometer system was used to obtain the initial readings. The system is owned by CENAE and includes the following equipment:

- a) **Inclinometer Casing**: Slope Indicator Company's (SINCO) inclinometer casing; 2.32-inch-I.D. by 2.75-inch-O.D. Standard ABS plastic inclinometer casing; Model No. 5110010.
- b) **Inclinometer Probe**: SINCO Digitilt Inclinometer Probe, Model No. 50302500, Serial No. 27747B.
- c) **Read Out Box**: SINCO Digitilt DataMate, Model No. 50310900, Serial No. 9680.
- d) **Control Cable**: SINCO Digitilt Control Cable, Model No. 50601010, 320 feet long.
- e) **Pulley Assembly**: SINCO Pulley Assembly with Jam Cleat, Model No. 51104606.

3.3 Inclinometer Readings

Prior to obtaining the initial readings, GEI marked the A_0 groove on each inclinometer casing. The grooves of the inclinometer casing were aligned during installation so that one set of grooves (A_0-A_{180}) was perpendicular to the crest of the dam, and one set of grooves (B_0-B_{180}) was parallel to the crest of the Dam. The A_0 groove is the groove closest aligned to the downstream direction.

The initial readings for each inclinometer consisted of three separate reading sets. One complete inclinometer reading set is defined as a series of readings at 2-foot intervals along the length of the inclinometer casing with the upper guide wheel in the A_0 casing groove and a second series of readings with the probe rotated 180 degrees and the upper guide wheel in the A_{180} casing groove. Depths of the inclinometer readings were referenced from the top of the inclinometer casing. Inclinometer Monitoring Forms that include a sketch of the equipment setup and reference point were filled out for each inclinometer and are attached to the Daily Field Reports

included in Appendix D. A summary of the initial inclinometer readings is presented in Table 1; tabular printouts of the initial readings are presented in Appendix B.

3.4 Spiral Correction

GEI measured the amount of spiral of the grooves of the inclinometer casing using the SINCO Spiral Sensor Model No. 50900199. Before taking the spiral readings, GEI measured the zero offset of the spiral sensor following the procedure outlined in the SINCO Spiral Sensor Manual. The zero-offset measurements are attached to Field Report No. 3 in Appendix D. The zero-offset was used to process the spiral data.

The spiral measurements were obtained using the same control cable and Digitilt DataMate readout box that was used for the standard inclinometer readings. The procedure used for obtaining the spiral readings was the same as that used for the standard inclinometer readings with the following exceptions:

- a) The distance between the guide wheels of the spiral sensor is 5 feet, so readings are taken at 5-foot intervals.
- b) A complete reading set consists of four traverses with the spiral sensor. One traverse is performed with the upper guide wheel in each of the four inclinometer casing grooves.

The reference point and equipment set-up used for the spiral measurements were the same as those for the standard inclinometer readings as shown on the Inclinometer Monitoring Forms in Appendix D. The reading depths for the spiral measurements were selected so that the final (upper) reading of each inclinometer casing would be at the 2-foot mark on the cable. Tabular printouts of the unprocessed field spiral measurements are presented in Appendix C.1.

3.5 Orientation Correction

Ideally, the grooves of the inclinometer casing should be aligned perpendicular and parallel to the centerline of the dam. GEI used a Brunton compass to check the alignment of the grooves of the inclinometer casing relative to the centerline of the dam. The alignment of the centerline of the dam is curved in a slightly concave shape facing downstream. To account for the slight curvature, GEI measured the alignment of a tangent to the centerline of the dam directly upslope from each inclinometer location. GEI measured the alignment of the B_0 - B_{180} grooves of the inclinometer casing, which should be parallel to the alignment of the centerline of the dam. The difference between the alignment of the B_0 - B_{180} grooves and the alignment of the centerline of the dam upslope from the inclinometer location is the orientation correction. A positive orientation correction is in the clockwise direction. Table 2 presents a summary of the measurements of the alignment of the centerline of the dam upslope from each inclinometer location, the alignments of the B_0 - B_{180} grooves of the inclinometer casing, and the orientation

corrections. The orientation of the grooves of the inclinometer casings are shown on the Inclinometer Location Plan presented as Fig. 2.

3.6 Inclinometer IC-96-3

The alignment of the casing grooves for Inclinometer IC-96-3 deviated 40 degrees from the alignment of the crest of the dam. This means that the direction downstream perpendicular to the crest of the dam almost bisects the A and B grooves of the inclinometer casing. The initial reading set for this inclinometer includes one additional set of readings that was performed with the guide wheels of the inclinometer probe in the B_0 and B_{180} grooves. This reading set might be needed in the future to provide a more accurate picture of movements in the downstream direction.

4. DATA REDUCTION AND PLOTTING

4.1 Data Reduction and Validation

Inclinometer readings are electronically recorded by the Digitilt DataMate in the field. SINCO DMM software is used to download the inclinometer data from the DataMate to a computer. The DMM software is also used to calculate check-sum statistics and deviations for each data set.

The check-sum is the algebraic sum of inclinometer readings taken 180 degrees apart at the same depth. The DMM software calculates the mean and standard deviation of the check-sums for an entire data set. The check-sum statistics for each inclinometer reading set are summarized in Table 1. The standard deviations of the A check-sums for all the inclinometer reading sets ranged from 1.4 to 4.7 digits, and the standard deviations of the B check-sums ranged from 3.8 to 7.2 digits. Standard deviations published in Reference 8 list typical or acceptable values for A check-sums between 1 and 10 and B check-sums between 10 and 20.

GEI selected the reading set with the lowest check-sum statistics to be the initial datum set for each inclinometer. The reading set GEI selected is highlighted in Table 1.

The DMM software also reduces the inclinometer data and calculates displacements and deviations of the inclinometer casing versus depth. Printouts of the inclinometer data including calculated deviations of the inclinometer casing from a vertical line through the bottom of the casing are presented in Appendix C. The total cumulative deviation from the bottom to the top of the inclinometer casing calculated for each data set is presented in Table 1.

The spiral sensor data was processed using the SINCO software Digipro Utilities (DU). The software takes the average of the spiral measurements obtained in each of the four casing grooves and then applies the zero-offset correction. The software also adjusts depths of the spiral measurements to match with the standard inclinometer reading depths. When taking standard inclinometer readings, the depth marks on the control cable are referenced to the midpoint of the inclinometer sensor's wheel base. When the spiral sensor is used, the control cable depth marks are referenced to a point approximately 1 foot below the upper guide wheels and 4 feet above the lower guide wheels. Since the spiral sensor measures the spiral between the upper and lower guide wheels, the depth of each spiral measurement must be corrected to reflect the actual depth of the lower guide wheels. The software corrects the depths of the spiral measurements by adding 4 feet to all spiral measurement depths (i.e., the spiral measurement at the cable depth of 2 feet is corrected to reflect the instrument depth of 6 feet). The software then interpolates between each of the adjusted spiral measurements taken at 5-foot intervals to calculate the amount of cumulative spiral at each 2-foot inclinometer reading interval. The software assumes zero twist at the top of the casing and interpolates between zero and the initial spiral reading corrected to a depth of 6 feet to get the amount of spiral at the 2-foot and 4-foot

depths. In all but two of the inclinometers (IC-96-2 and IC-96-7), correcting the deepest spiral measurement provided data below the deepest corresponding inclinometer reading. In inclinometers IC-96-2 and IC-96-7, the deepest inclinometer reading depth was 2 feet and 1 foot below the deepest adjusted spiral reading depth, respectively. In these two instances, the spiral measurements were extrapolated from the last two spiral readings to provide data at the depth of the deepest inclinometer reading.

The processed and expanded spiral data sheets are presented in Appendix C.2. The spiral data are given in units of arc minutes of rotation. The maximum cumulative spiral measured in the inclinometer casings ranged from 1.5 to 6.8 degrees. The maximum cumulative spiral measured in each inclinometer casing is shown in Table 2. SINCO reports that the tolerance from the machining process of the inclinometer casing is 1/3 degree of spiral per 10-foot length. Based on the tolerance and the lengths of casing installed in the boreholes in Ball Mountain Dam, we could expect 3.4 to 8.6 degrees of spiral. The maximum spiral measured in the inclinometer casings was within this range.

4.2 Inclinometer Plots

The inclinometer data were plotted using the SINCO Digipro software. Two plots were prepared for each inclinometer and are presented in Appendix A. A plot of cumulative deviation (profile) of the inclinometer casing calculated from the initial datum set selected by GEI was prepared for each inclinometer and is presented in Appendix A.1. A plot of the cumulative differences between the three initial inclinometer data sets was prepared for each inclinometer and is presented in Appendix A.2. The cumulative difference plots compare the second and third reading sets taken for each inclinometer to the first reading set. The spiral and orientation corrections have been included in all plots.

The elevation scale (y-axis) of the plots is about one inch equals 40 feet ($1''=40'$). The range of the elevation scale is from EL. 740 to 1040 feet NGVD for the plots of inclinometer IC-96-1 through IC-96-6 and is from EL. 680 to 980 feet NGVD for inclinometer IC-96-7. The deviation scale (x-axis) for the cumulative deviation plots is about one inch equals 10 feet ($1''=10'$). The displacement scale (x-axis) for the cumulative displacement plots is about one inch equals one inch ($1''=1"$). The scales on the plots are approximate because the software does not allow the user to select exact scales.

Specific titles and a borehole log have been created for each inclinometer plot. The titles and borehole log have been saved in electronic files that have file names matching the inclinometer number followed by the suffix ".ano".

4.3 Inclinometer Cross Sections

Three cross sections have been drawn through the dam at the approximate locations of the slope inclinometers. The plan locations of the cross sections are shown in Fig. 2. The cross sections are drawn at about Sta. 8+00, Sta. 6+00, and Sta. 4+00 and are presented as Figs. 3, 4, and 5, respectively.

The strata breaks shown in the cross sections are based on information obtained during the advancement of the boreholes for installation of the slope inclinometers. The basic geometry of the dam shown is based on the original design drawings of the dam provided by CENAE. The cross sections and the inclinometer plots in Appendix A were both created using an elevation scale of one inch equals 40 feet ($1''=40'$) to facilitate data presentation in the future.

5. RECOMMENDATIONS

The plots of the inclinometer data in Appendix A incorporate both the orientation and spiral corrections. The plots were prepared this way to check that the corrections are functioning properly. GEI recommends that the future inclinometer data be plotted without the spiral and orientation corrections, except for inclinometer IC-96-3, for the following reasons:

- a) The inclinometer probe tracks with its guide wheels in the A grooves of the inclinometer casing; therefore, the measurements in the A direction are more reliable than the measurements in the B direction. Using the spiral and orientation corrections to plot movement in the A direction will include a component of the movement measured in the B direction. This may introduce some error or confusion in the plots of the data at the initial stages of the monitoring program when small amounts of movement are observed.
- b) Except for inclinometer IC-96-3, the largest cumulative amount of spiral and orientation correction is 12.7 degrees. Applying this correction to the data would only have an overall corrective effect of a 3% change in the magnitude of movement.

Inclinometer IC-96-3 has orientation correction of 40 degrees. If movement is observed in the B direction of this inclinometer consideration should be given to using the orientation correction.

Readings of the seven new inclinometers should be taken quarterly for the next year to establish a data base. Reading frequency could then be reduced to annual and/or following major floods.

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TABLE 1 - SUMMARY OF INITIAL READINGS
1997 Initial Inclinometer Readings
Jamaica, Vermont
Ball Mountain Dam

Page 1 of 2

Inclinometer Number	Data Set Number	A Checksum		B Checksum		Deviation at Top of Casing (b)	
		Mean	Standard Deviation	Mean	Standard Deviation	A (inches)	B (inches)
IC-96-1	1	-56.9	4.2	-85.1	5.7	-47.7954	-109.6440
	2	-56.0	3.7	-86.1	5.2	-47.8284	-109.5546
	3	-56.9	4.2	-86.9	5.2	-47.8476	-109.5336
IC-96-2	1	-54.3	2.6	-88.6	7.2	125.0046	-70.3470
	2	-58.6	2.8	-90.5	6.9	125.0256	-70.3752
	3	-59.6	2.6	-88.9	6.3	125.0628	-70.3122
IC-96-3	1	-56.3	2.3	-109.4	5.1	-26.6550	-49.9806
	2	-55.1	2.3	-89.0	5.0	-26.5842	-49.9884
	3	-58.3	2.6	-87.0	5.1	-26.5212	-49.9842
	4 (a)	-61.8	2.1	-89.0	5.2	-26.5710 (a)	-49.8594 (a)
IC-96-4	1	-57.6	1.8	-91.7	4.2	5.0154	15.9828
	2	-60.4	1.4	-93.6	3.9	5.0064	15.7062
	3	-60.5	1.4	-93.9	4.4	5.0130	15.8364
IC-96-5	1	-59.8	4.7	-93.9	4.2	5.2206	-21.6408
	2	-60.5	2.6	-95.4	4.5	5.0280	-21.7026
	3	-60.5	2.9	-96.2	3.8	5.1348	-21.7032

TABLE 1 - SUMMARY OF INITIAL READINGS
1997 Initial Inclinometer Readings
Jamaica, Vermont
Ball Mountain Dam

Page 2 of 2

Inclinometer Number	Data Set Number	A Checksum		B Checksum		Deviation at Top of Casing (b)	
		Mean	Standard Deviation	Mean	Standard Deviation	A (inches)	B (inches)
IC-96-6	1	-56.0	2.6	-94.0	4.6	35.7432	-27.6882
	2	-63.8	1.8	-92.3	4.1	35.7156	-27.7188
	3	-64.0	1.6	-97.3	4.2	35.6916	-27.7350
IC-96-7	1	-59.9	3.0	-90.6	5.3	-41.2842	-78.2544
	2	-61.0	2.8	-90.5	4.8	-41.3160	-78.1566
	3	-61.5	2.2	-93.3	5.0	-41.3286	-78.2124

Notes: The data set that is shaded is the one GEI recommended for the initial datum set.

- (a) Data set #4 for Inclinometer IC-96-3 is an extra data set taken with the guide wheels set in the B-grooves.
- (b) Deviation at top of casing listed is prior to orientation and spiral corrections.

TABLE 2 - SUMMARY OF ORIENTATION AND SPIRAL CORRECTIONS
 1997 Initial Inclinometer Readings
 Bell Mountain Dam
 Jamaica, Vermont

Inclinometer Number	Approximate Station Number at Inclinometer Location (a)	Orientation of Centerline of Dam at Inclinometer Station Number (b) (degrees)	Orientation of B_0 - B_{180} Casing Grooves (parallel to centerline) (degrees)	Orientation Correction (c) (degrees)	Maximum Cumulative Spiral of Inclinometer Casing (d) (degrees)
IC-96-1	8+50	N 2° E	N 4° W	+6°	+6.7°
IC-96-2	6+00	N 9° E	N 12° E	-3°	-5.9°
IC-96-3	3+50	N 18° E	N 58° E	-40°	-1.5°
IC-96-4	7+80	N 4° E	N 2° W	+6°	-2.6°
IC-96-5	4+30	N 13° E	N 5° E	+8°	2.7°
IC-96-6	7+80	N 4° E	N 7° E	-3°	-4.1°
IC-96-7	6+00	N 9° E	N 7° E	+2°	-6.8°

General Notes:

1. Orientation measurements were made with a Brunton Field Compass. The Brunton compass was corrected 16 degrees to account for the difference between magnetic north and true grid north.
2. Spiral measurements of the inclinometer casing were made with the Slope Indicator Spiral Sensor; Model No. 50900199; Serial No. 032-5; Zero-Offset = -23.

Footnotes:

- a) Station Numbers are referenced to the centerline of the dam. Station 0+00 is at left (north) abutment. Station numbers at inclinometer locations were provided by CENAE.
- b) The orientation correction is the difference between the orientation of the centerline of the dam at each inclinometer station and the orientation of the B_0 - B_{180} casing grooves. A positive orientation correction is clockwise.
- c) A positive value for the spiral measurement is clockwise. The maximum cumulative spiral was obtained from the expanded spiral data sheets in Appendix C.2. The data sheets report cumulative spiral of the inclinometer casing in arc minutes.

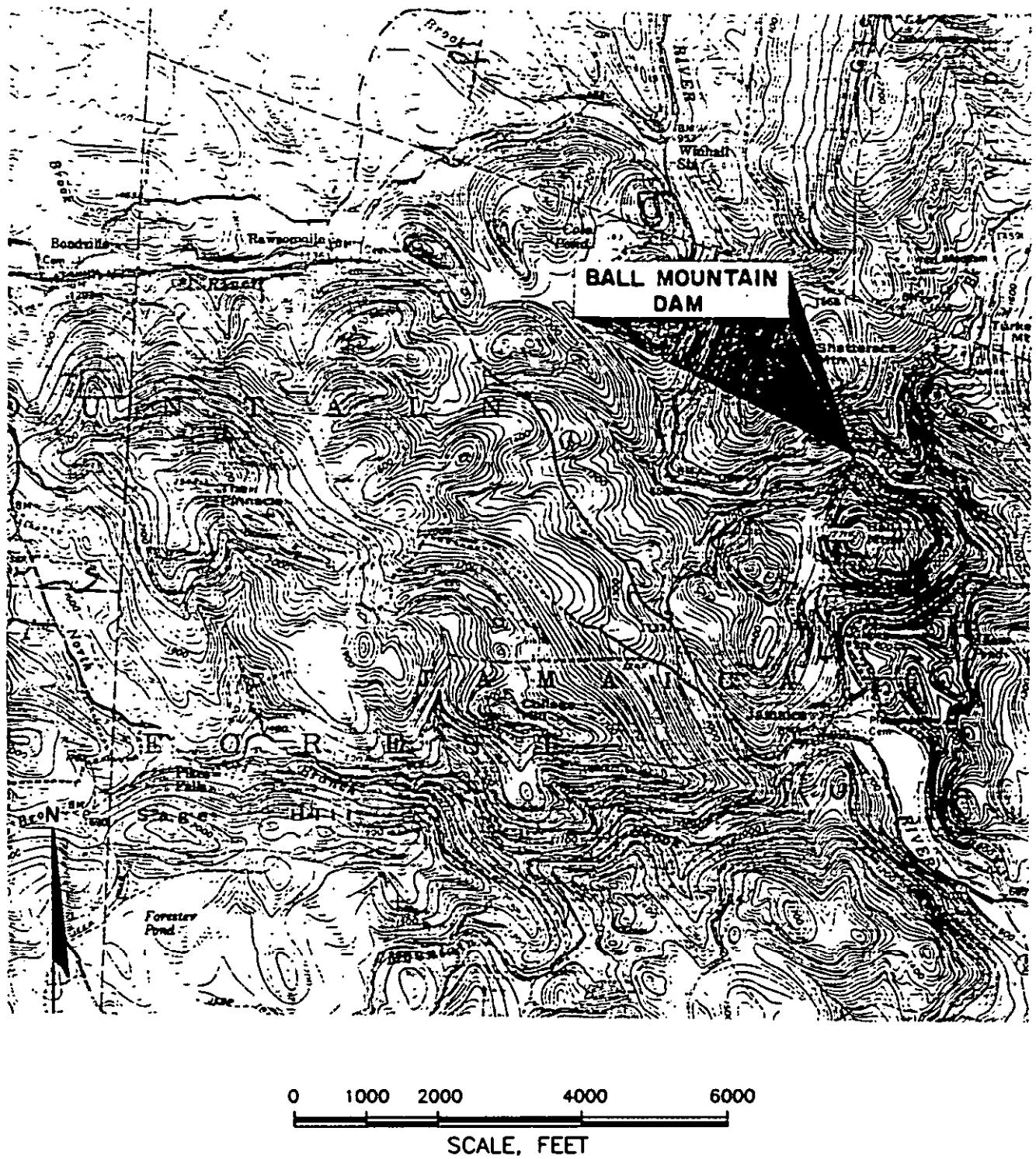
TABLE 3 - SUMMARY OF INCLINOMETER CASING ELEVATIONS
 1997 Initial Inclinometer Readings
 Ball Mountain Dam
 Jamaica, Vermont

Inclinometer Number	Original Elevation Top of Inclinometer Casing (feet, NGVD)	Length of Inclinometer Casing Cut (a) (feet)	New Elevation Top of Inclinometer Casing (feet, NGVD)
IC-96-01	1017.10	0.31	1016.79
IC-96-02	1017.49	0.71	1016.78
IC-96-03	1017.68	0.16	1017.52
IC-96-04	951.17	0.61	950.56
IC-96-05	950.65	0.26	950.39
IC-96-06	886.10	0.21	885.89
IC-96-07	888.22	0.51	887.71

Footnote:

:

- a) Inclinometer casing was cut on July 17, 1997 by T. Wong and R. Pretto of CE-NAE.



Map is taken from U.S.G.S. Topographic 15 Minute Series.
 Londonderry, Vermont Quadrangle.
 Datum is National Geodetic Vertical Datum (NGVD).
 Contour Interval is 20 Feet.

U.S. Army Corps of Engineers
 Waltham, Massachusetts



GEI Consultants, Inc.

1997 Inclinometer
 Initial Readings
 Ball Mountain Dam
 Jamaica, Vermont

Project 97486

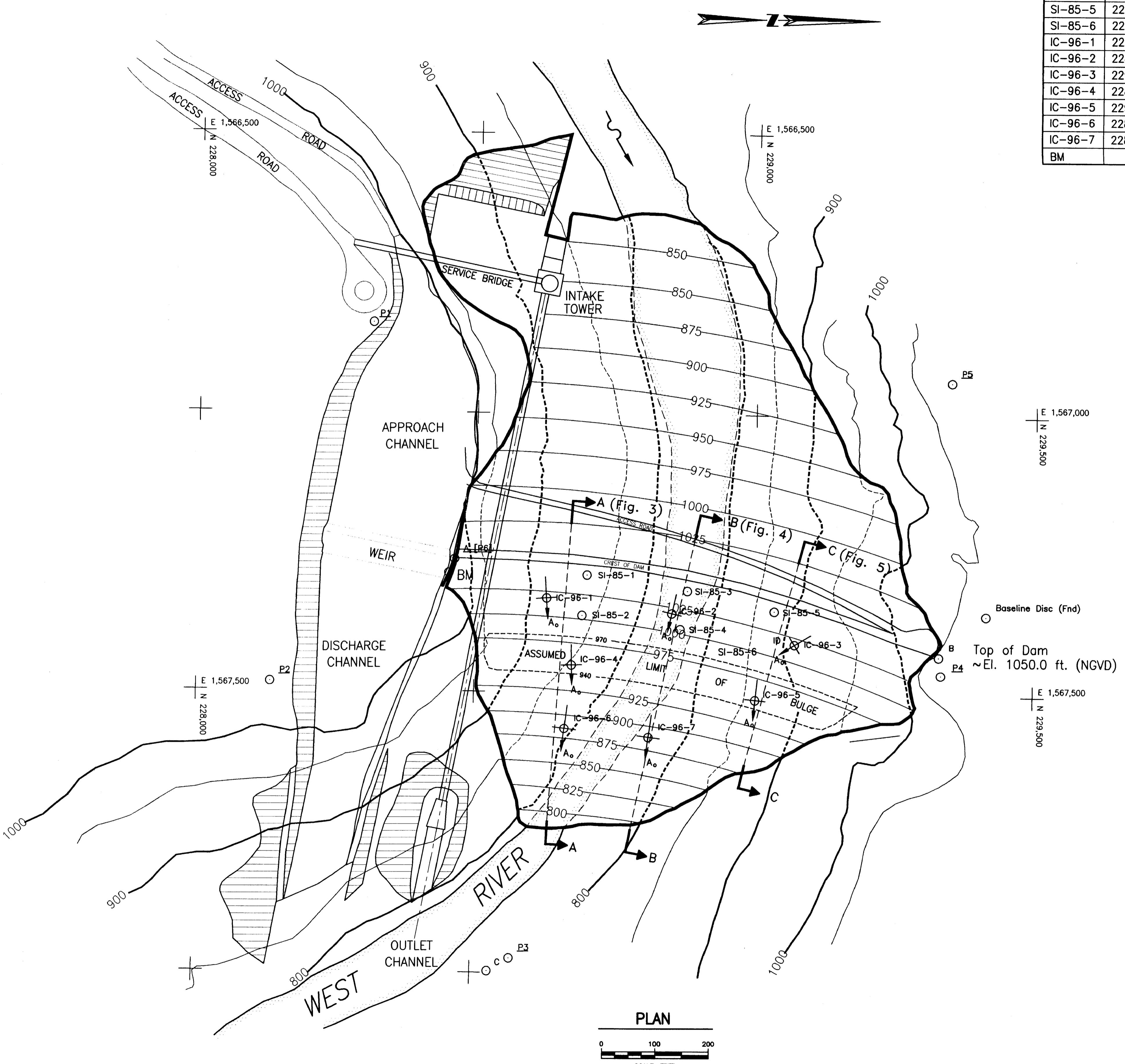
SITE LOCATION MAP

November 1997

Fig. 1

SCHEDULE OF COORDINATES IN U.S. SURVEY FEET DECEMBER, 1996

Station	NAD 83 Vermont State Plane Northing (Y) [US Ft.]	Corps Local Geodetic Easting (X) [US Ft.]	Elevation(NGVD) Guard pipe (Z) [US Ft.]	Elevation(NGVD) (Inclinometer Casing) [US Ft.]	Orientation of A_o (grooves)	Remarks
SI-85-1	228700.215	1567290.943	1725.187	1406.621	1043.705	1043.195
SI-85-2	228692.381	1567362.190	1654.528	1418.665	1001.108	Inclinometer Casing
SI-85-3	228880.497	1567317.761	1748.934	1587.333	1040.700	Inclinometer Casing
SI-85-4	228868.837	1567385.254	1680.833	1594.669	1002.229	Inclinometer Casing
SI-85-5	229037.176	1567352.059	1759.006	1747.408	1043.715	Inclinometer Casing
SI-85-6	229019.014	1567421.576	1687.175	1749.045	1002.009	Inclinometer Casing
IC-96-1	228628.388	1567332.430	1665.558	1348.957	1015.887	1016.790
IC-96-2	228853.463	1567357.535	1703.264	1572.267	1016.271	N 86° E Inclinometer Casing Boring FD-96-1
IC-96-3	229074.486	1567411.301	1712.296	1799.560	1016.425	N 102° E Inclinometer Casing Boring FD-96-4
IC-96-4	228675.054	1567451.334	1564.055	1426.500	950.087	N 148° E Inclinometer Casing Boring FD-96-6
IC-96-5	229005.103	1567510.553	1597.799	1760.115	950.654	N 88° E Inclinometer Casing Boring FD-96-2
IC-96-6	228663.962	1567564.519	1452.176	1446.933	884.690	N 95° E Inclinometer Casing Boring FD-96-7
IC-96-7	228815.507	1567579.030	1479.863	1596.634	885.890	N 97° E Inclinometer Casing Boring FD-96-3
BM					886.731	887.710
					1045.760	Reference Nail in Spillway wingwall



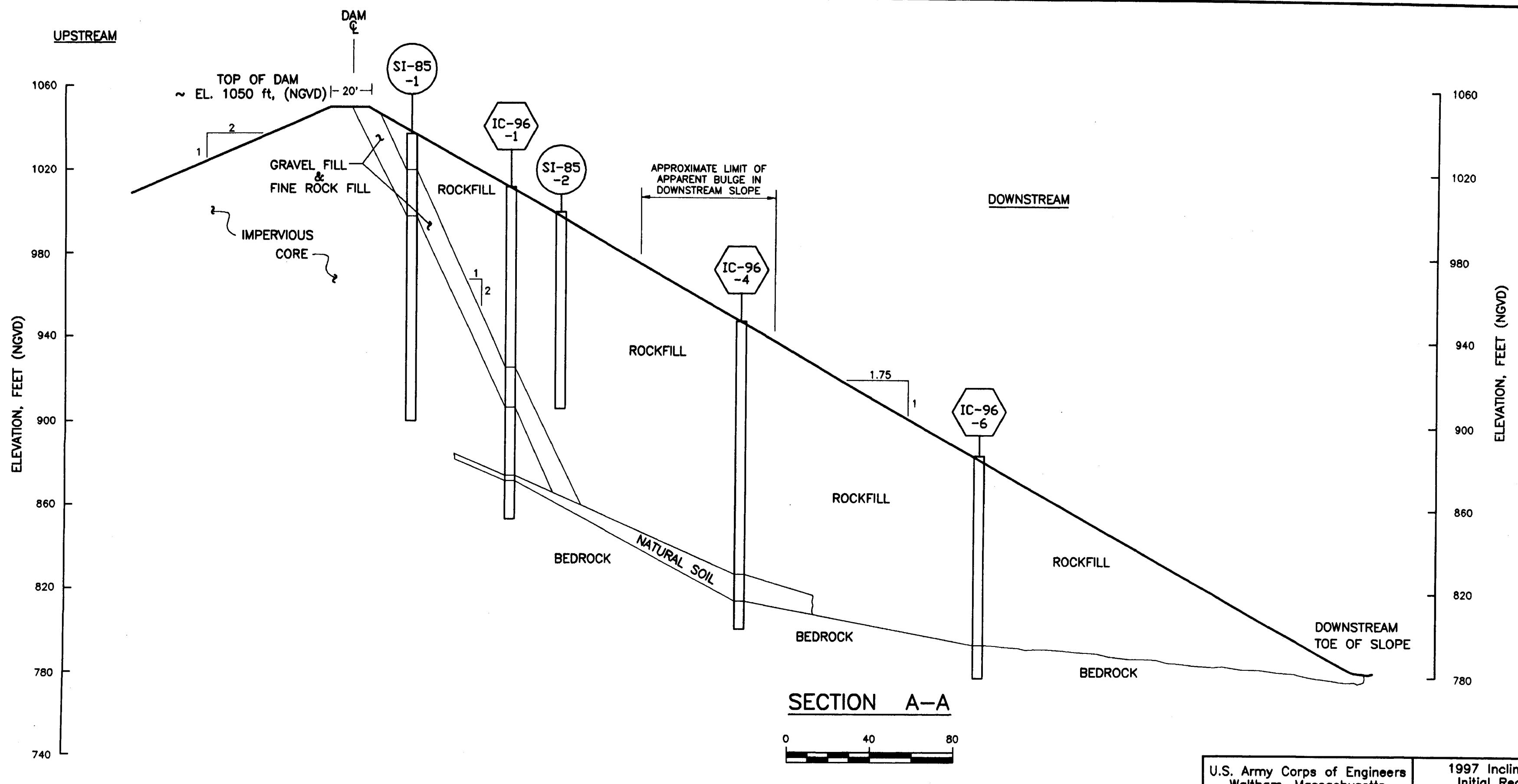
LEGEND:

- IC-96-5 Location and orientation of casing grooves for Inclinometer IC-96-5. Installed in 1996.
- SI-85-5 Location of Inclinometer SI-85-5. Installed in 1985.

NOTES:

1. The locations of the Inclinometers are based upon field surveys conducted during September and November, 1996. For detailed information consult "Ball Mountain Dam Survey Report" by The BSC Group dated December, 1996.
2. This drawing based upon an original prepared by the Corps of Engineers dated July, 1996.

DEPARTMENT OF THE ARMY New England District Corps of Engineers Waltham, Massachusetts	1997 Inclinometer Initial Readings Ball Mountain Dam Jamaica, Vermont	INCLINOMETER LOCATION PLAN
GEI Consultants, Inc. WINCHESTER • MASSACHUSETTS		
	Project 97486	November 1997



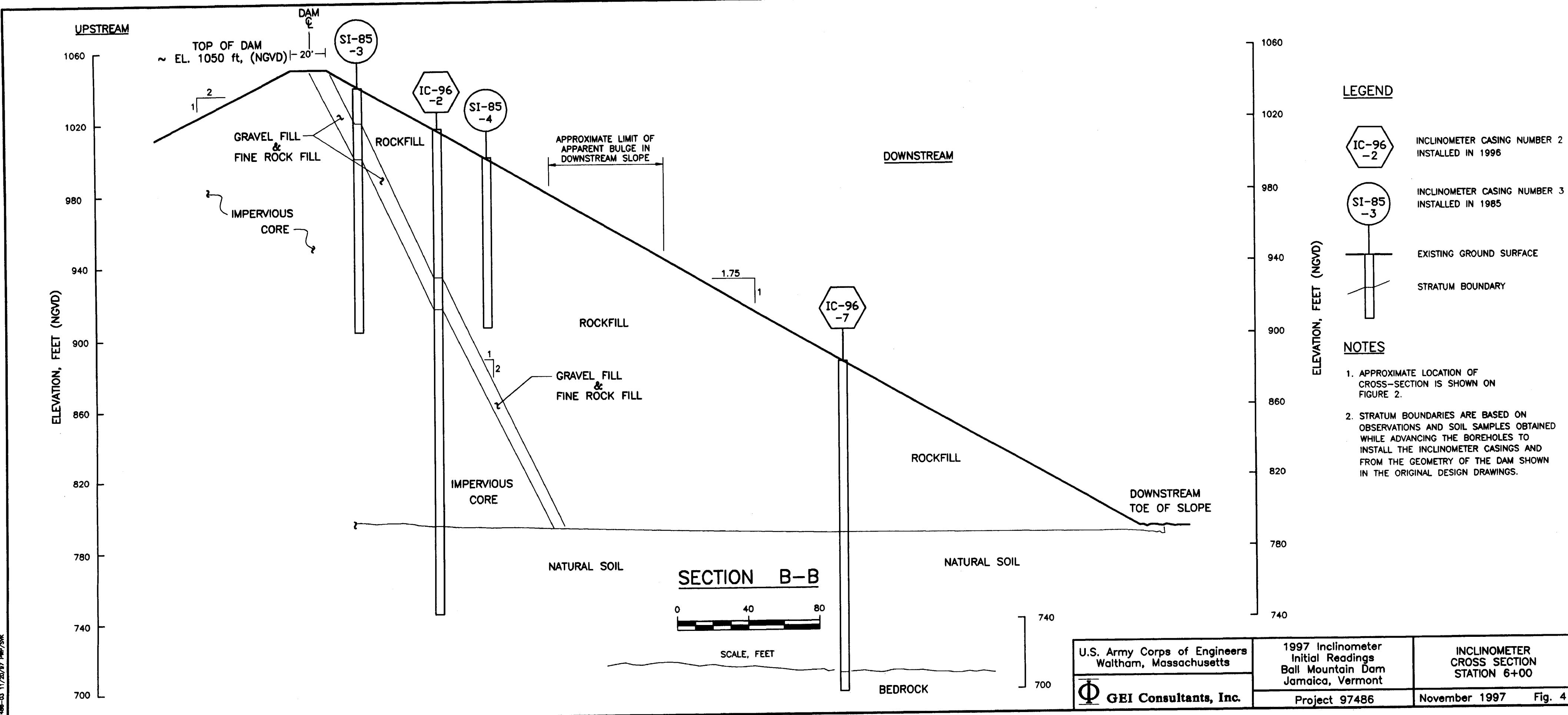
<u>LEGEND</u>	
IC-96-1	INCLINOMETER CASING NUMBER 1 INSTALLED IN 1996
SI-85-1	INCLINOMETER CASING NUMBER 1 INSTALLED IN 1985
EXISTING GROUND SURFACE	
STRATUM BOUNDARY	

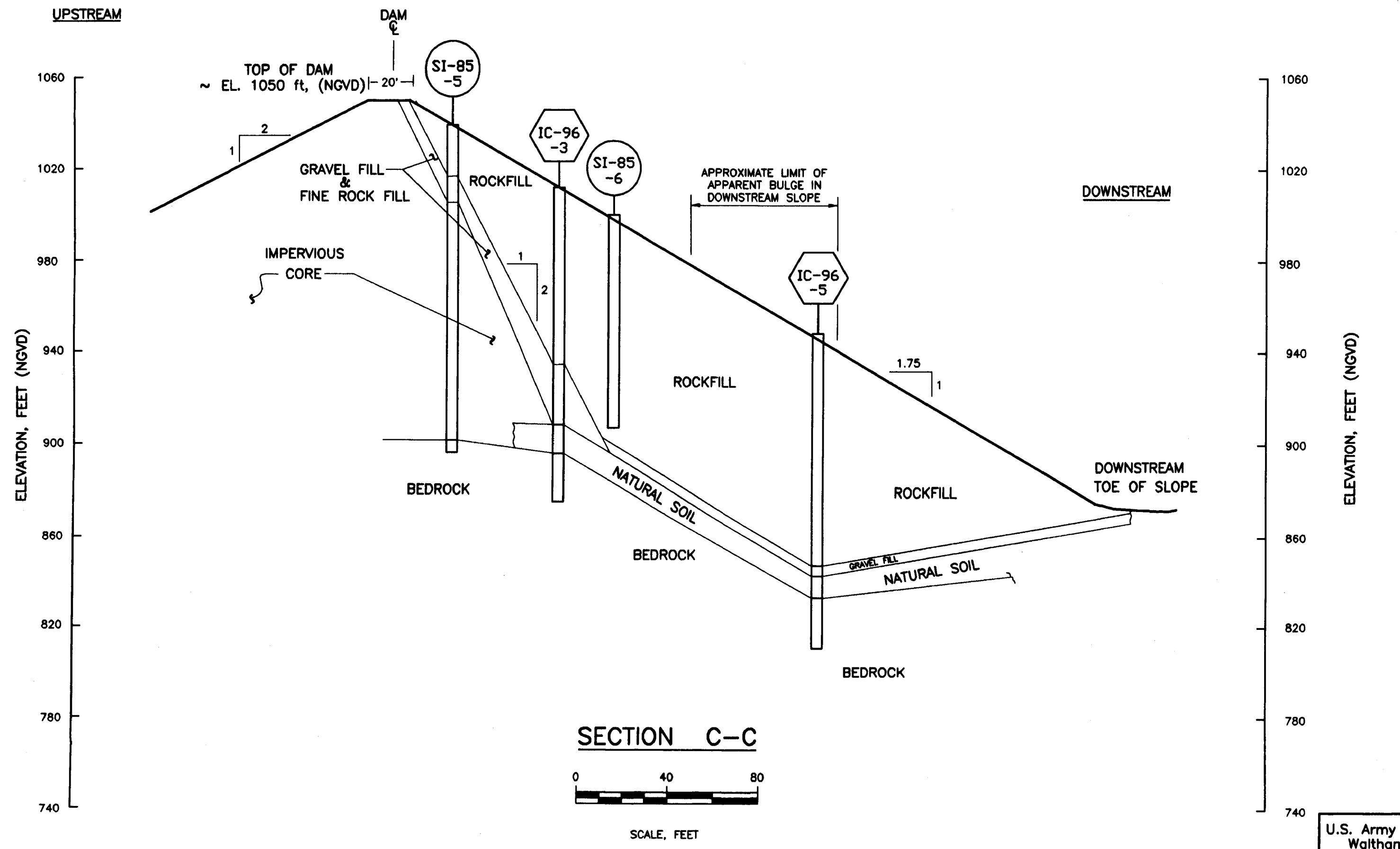
<u>NOTES</u>
1. APPROXIMATE LOCATION OF CROSS SECTION IS SHOWN ON FIGURE 2.
2. STRATUM BOUNDARIES ARE BASED ON OBSERVATIONS AND SOIL SAMPLES OBTAINED WHILE ADVANCING THE BOREHOLES TO INSTALL THE INCLINOMETER CASINGS AND FROM THE GEOMETRY OF THE DAM SHOWN IN THE ORIGINAL DESIGN DRAWINGS.

U.S. Army Corps of Engineers
Waltham, Massachusetts
 GEI Consultants, Inc.

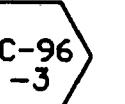
1997 Inclinometer
Initial Readings
Ball Mountain Dam
Jamaica, Vermont
Project 97486

INCLINOMETER
CROSS SECTION
STATION 8+00
November 1997 Fig. 3

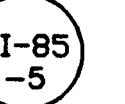




LEGEND



INCLINOMETER CASING NUMBER 3
INSTALLED IN 1996



INCLINOMETER CASING NUMBER 5
INSTALLED IN 1985

EXISTING GROUND SURFACE

STRATUM BOUNDARY

NOTES

1. APPROXIMATE LOCATION OF CROSS-SECTION IS SHOWN ON FIGURE 2.
 2. STRATUM BOUNDARIES ARE BASED ON OBSERVATIONS AND SOIL SAMPLES OBTAINED WHILE ADVANCING THE BOREHOLES TO INSTALL THE INCLINOMETER CASINGS AND FROM THE GEOMETRY OF THE DAM SHOWN IN THE ORIGINAL DESIGN DRAWINGS.

**U.S. Army Corps of Engineers
Waltham, Massachusetts**

 GEI Consultants, Inc.

**997 Inclinometer
Initial Readings
all Mountain Dam
Jamaica, Vermont**

Project 97486

**INCLINOMETER
CROSS SECTION
STATION 4+00**

ember 1997

APPENDIX A

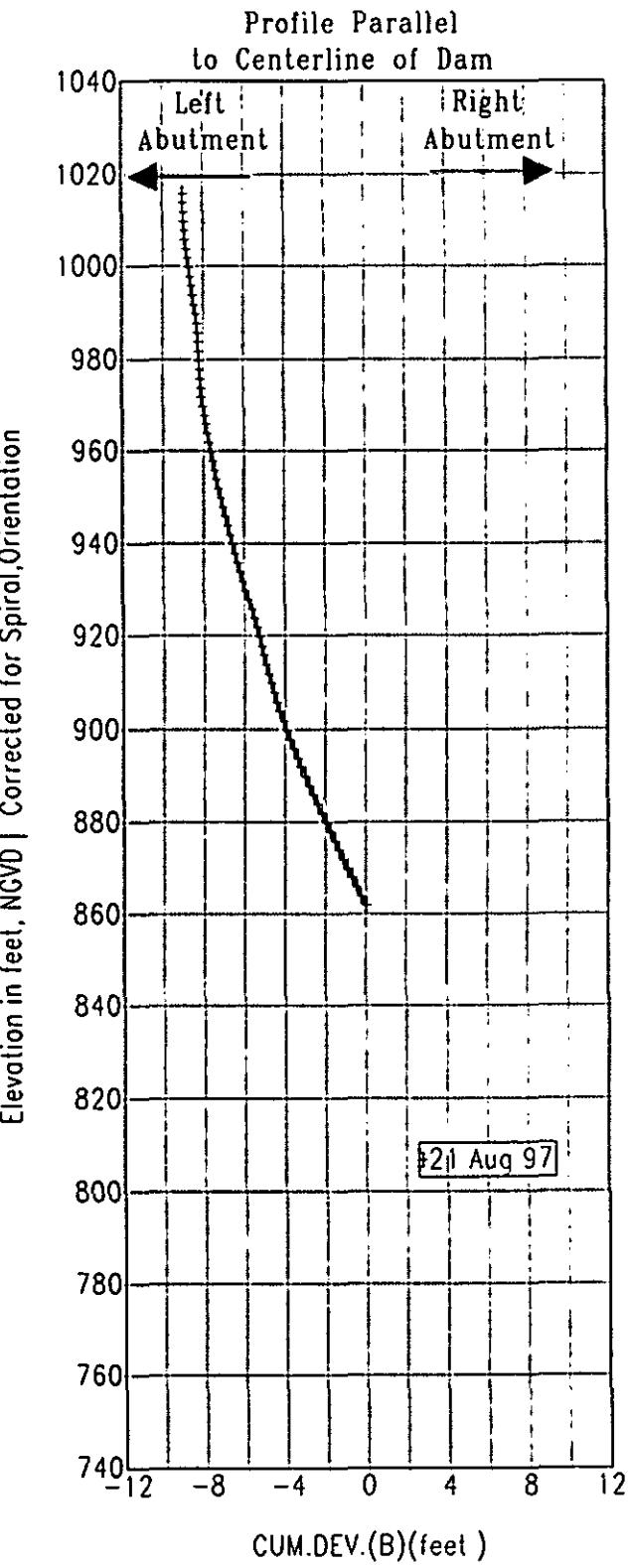
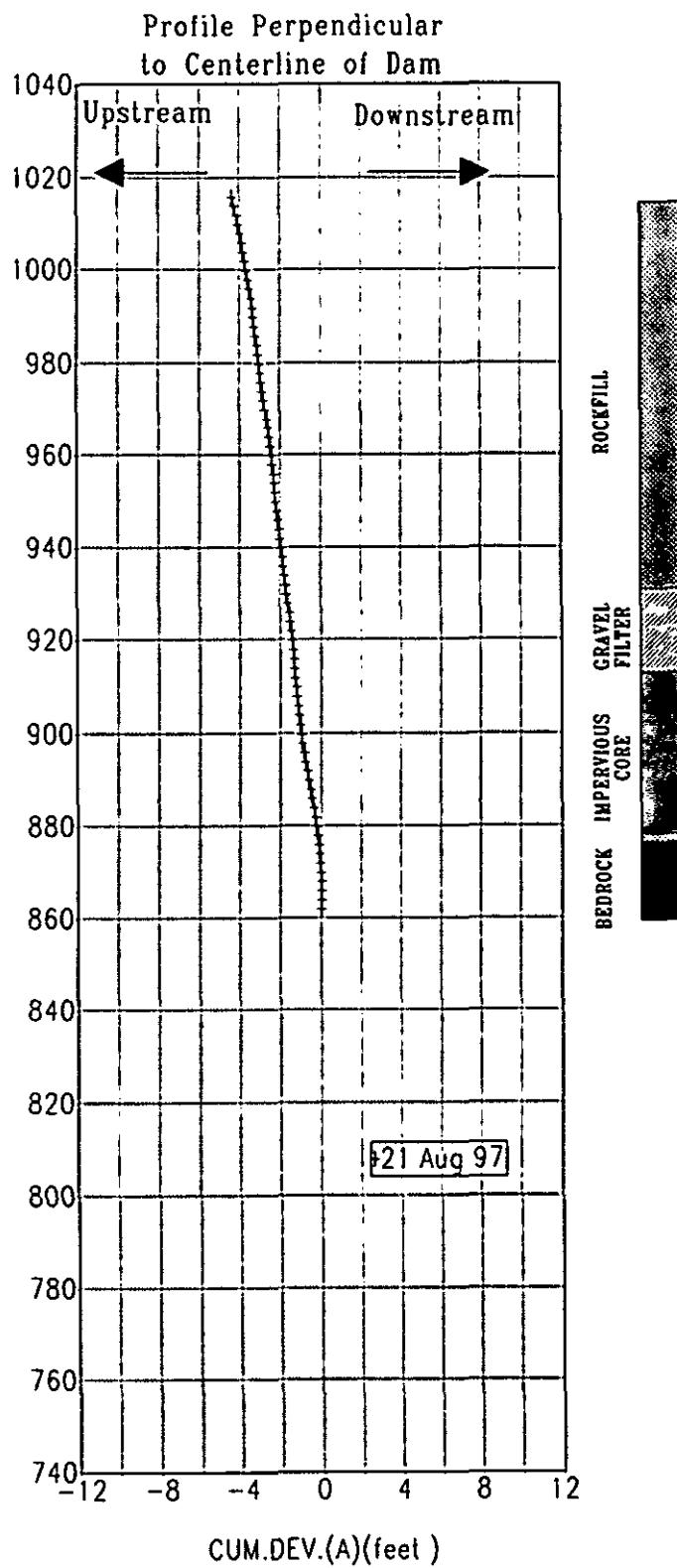
Inclinometer Initial Plots

- A.1 Plots of Cumulative Deviations for the Selected Datum Set for Each Inclinometer**
- A.2 Plots of Cumulative Differences Between the Three Initial Data Sets for Each Inclinometer**

Appendix A.1

Plots of Cumulative Deviations (Profile) for the Selected Datum Set for Each Inclinometer

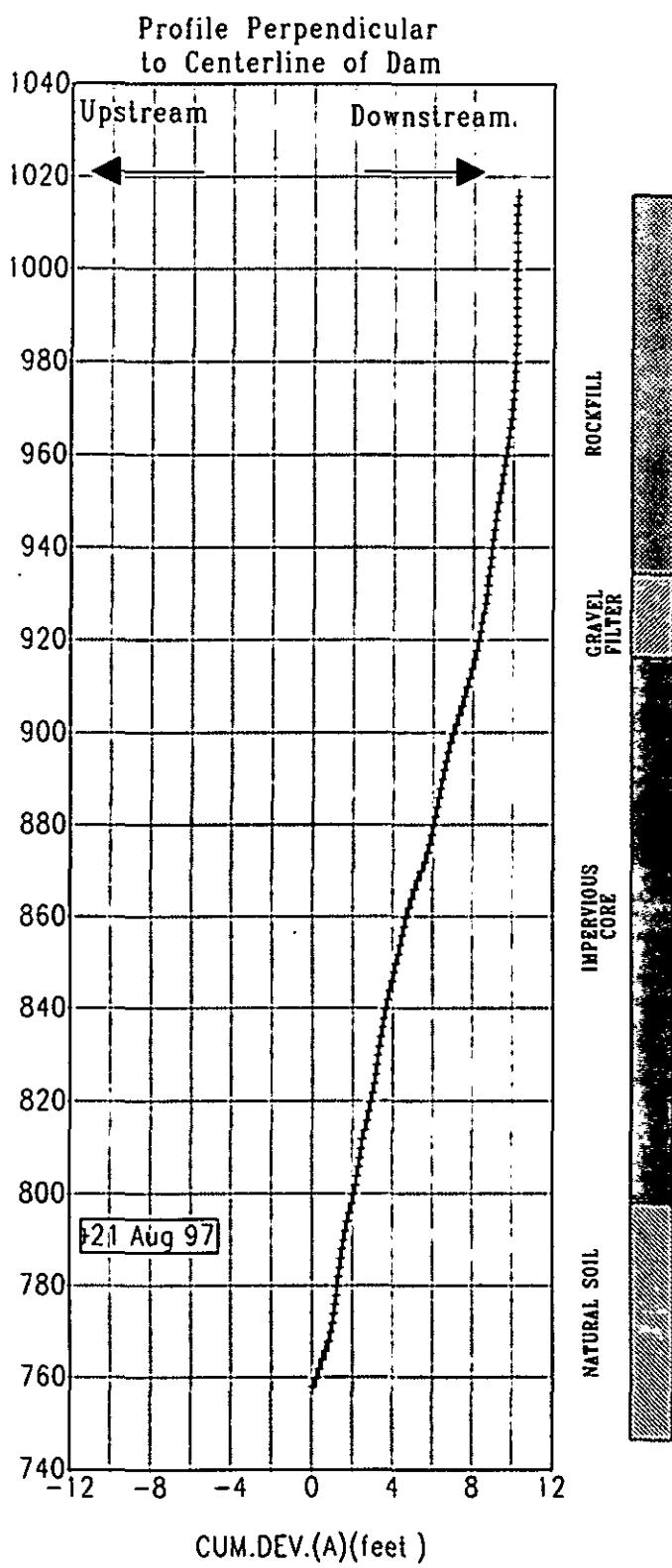
Elevation in feet, NGVD | Corrected for Spiral, Orientation



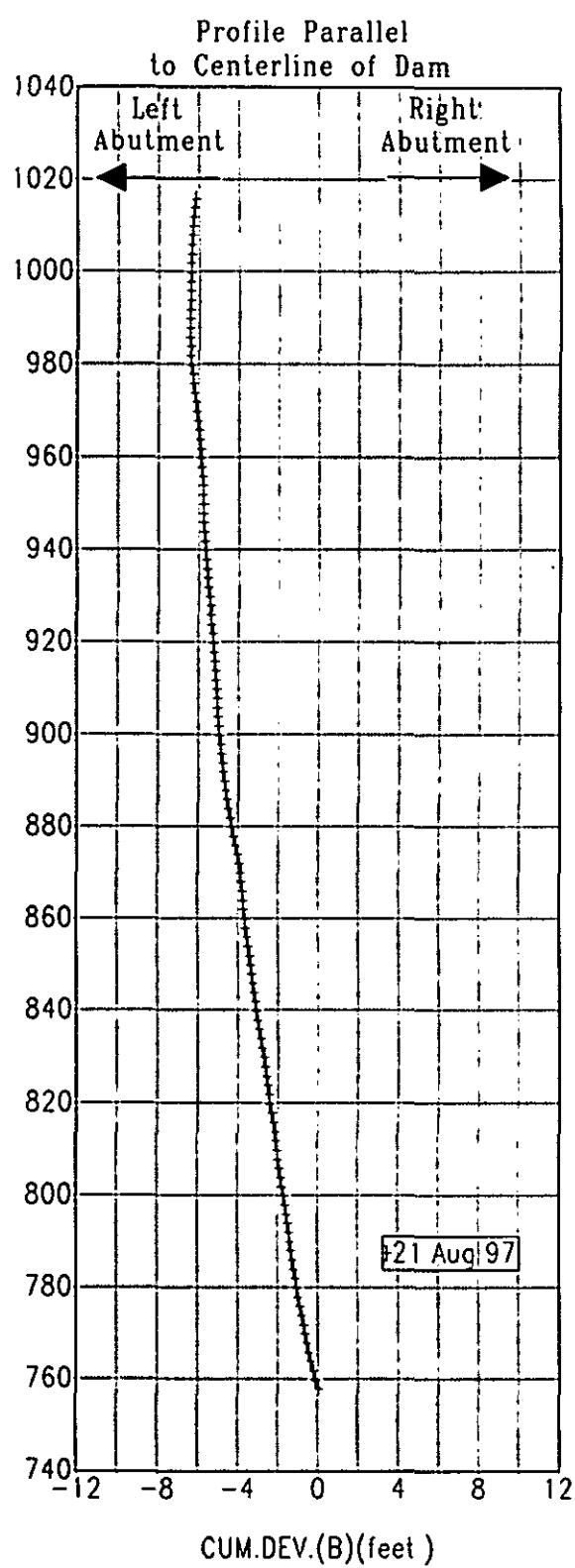
DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT
CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS

BALL MOUNTAIN DAM
JAMAICA, VERMONT
INCLINOMETER IC-96- 1 AUG. 1997

Elevation in feet, NGVD | Corrected for Spiral Orientation



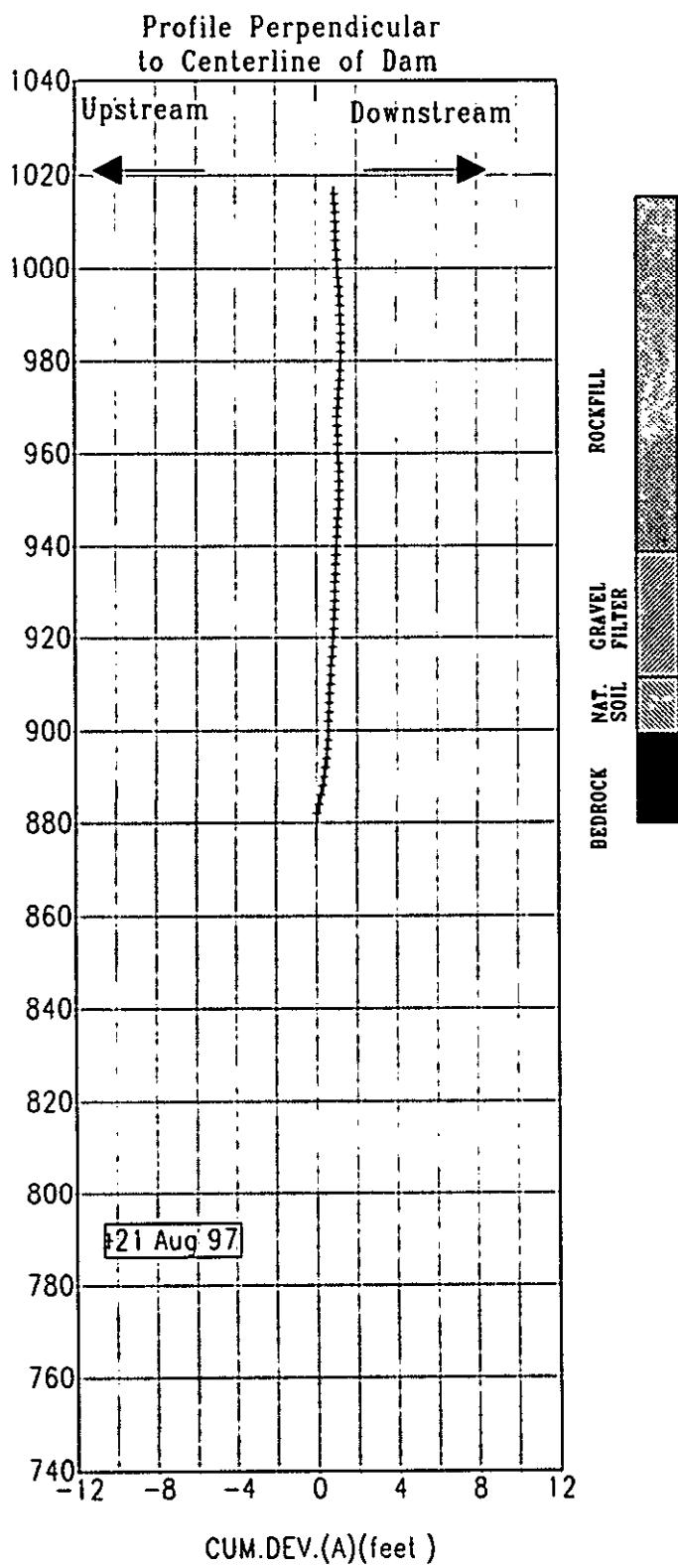
Elevation in feet, NGVD | Corrected for Spiral Orientation



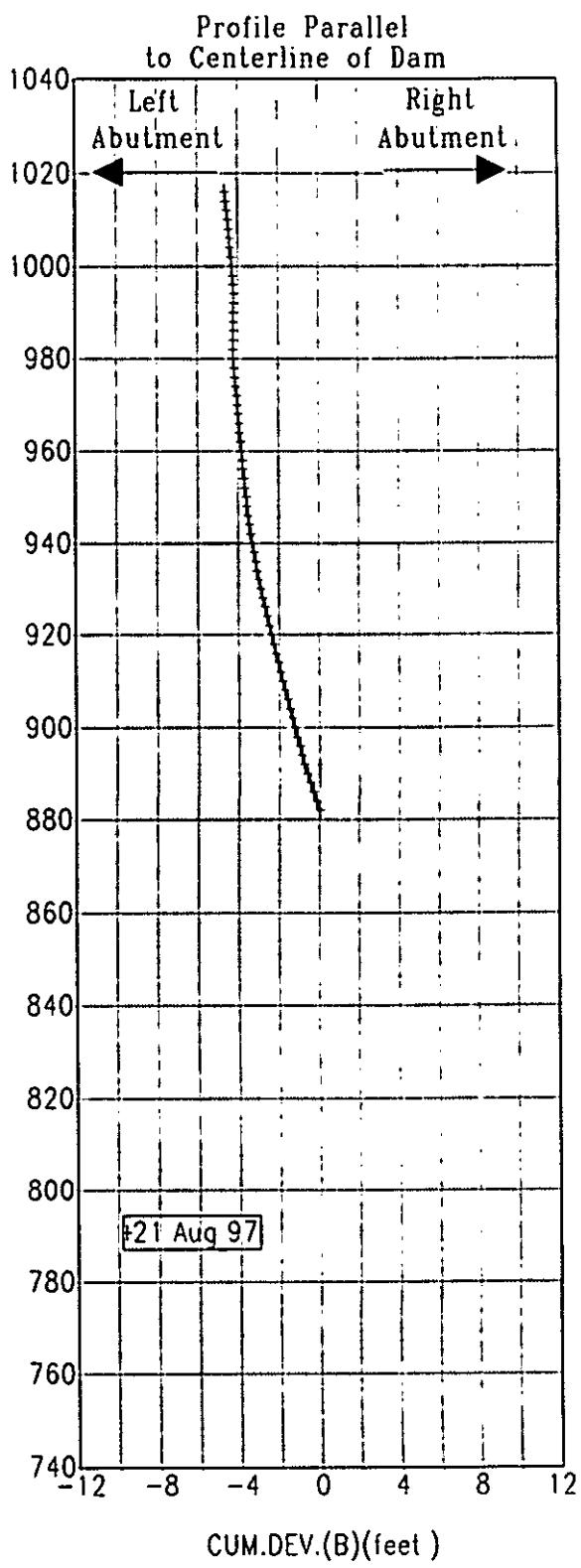
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BALL MOUNTAIN DAM
JAMAICA, VERMONT
INCLINOMETER IC-96-2 | AUG. 1997

Elevation in feet, NGVD | Corrected for Spiral Orientation



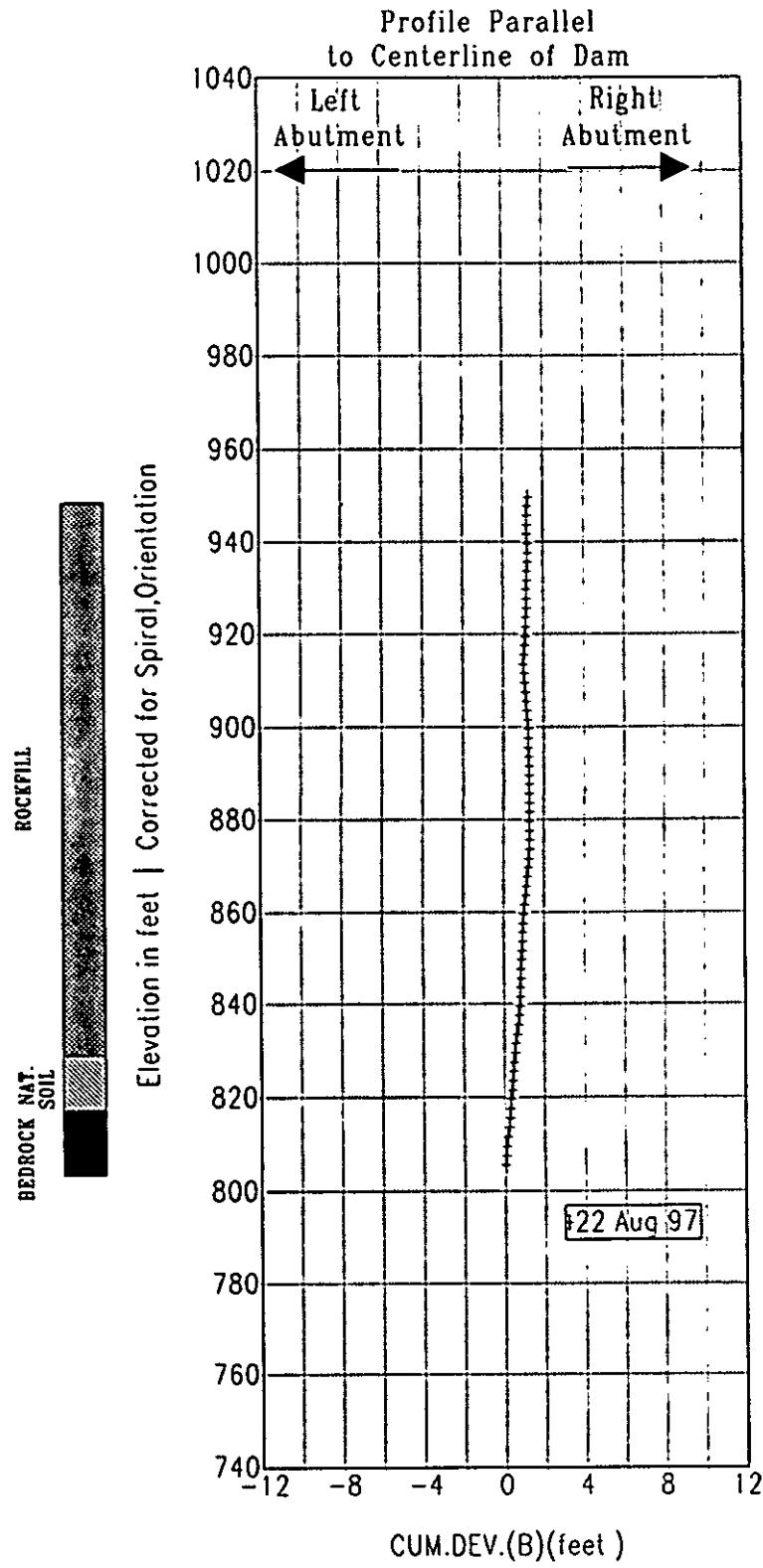
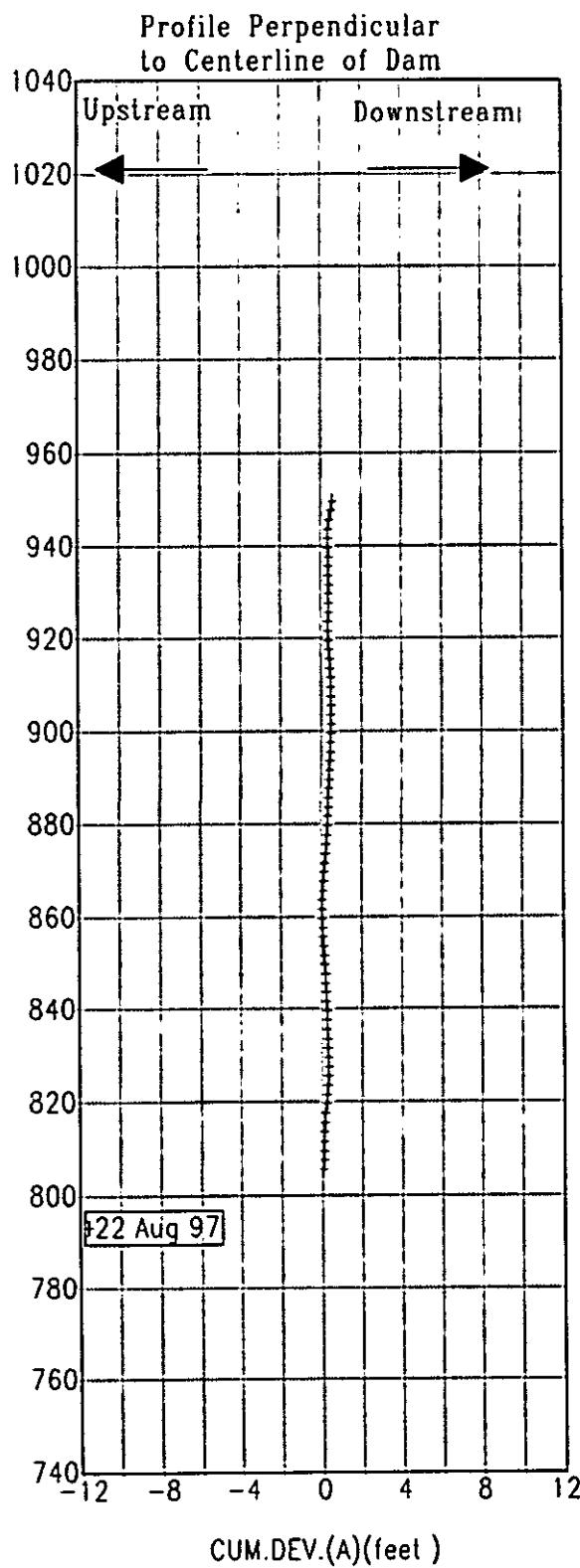
Elevation in feet, NGVD | Corrected for Spiral Orientation



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CORPS OF ENGINEERS
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BALL MOUNTAIN DAM
JAMAICA, VERMONT
INCLINOMETER IC-96-3 | AUG. 1997

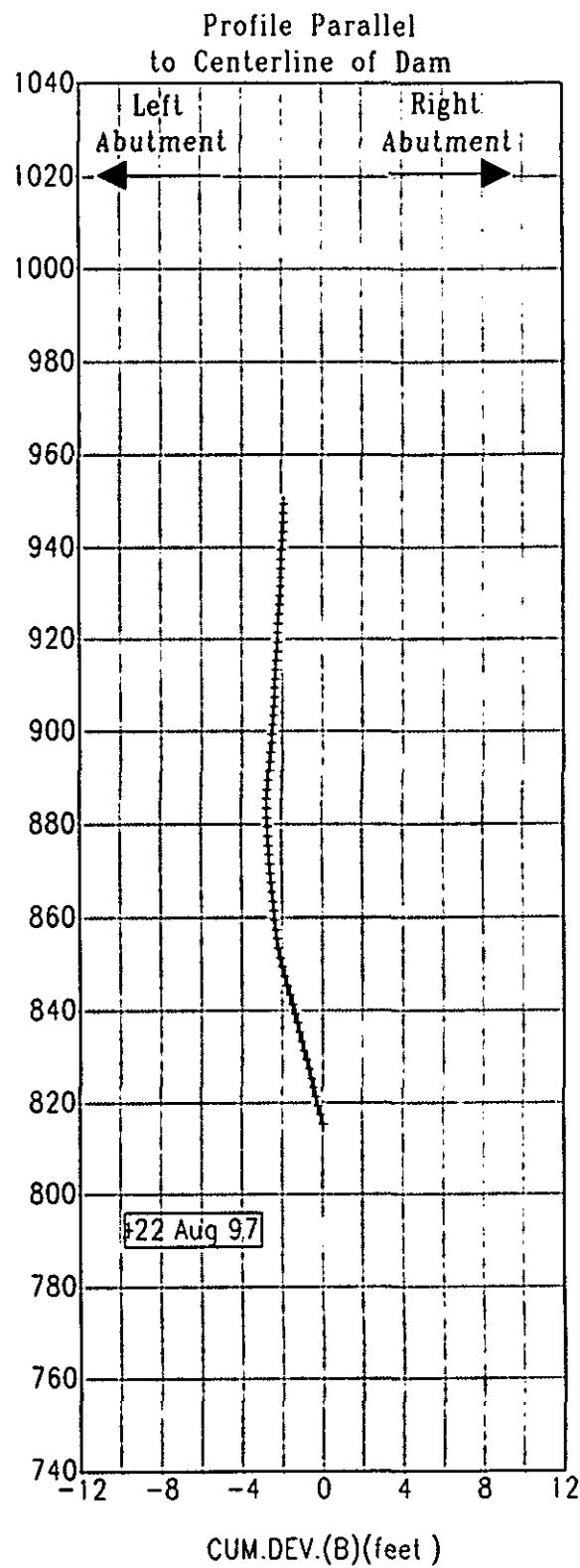
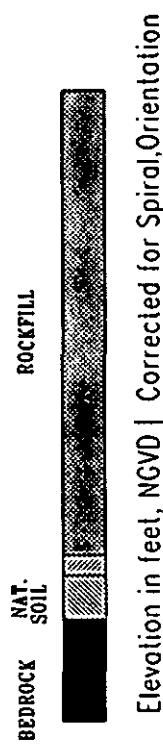
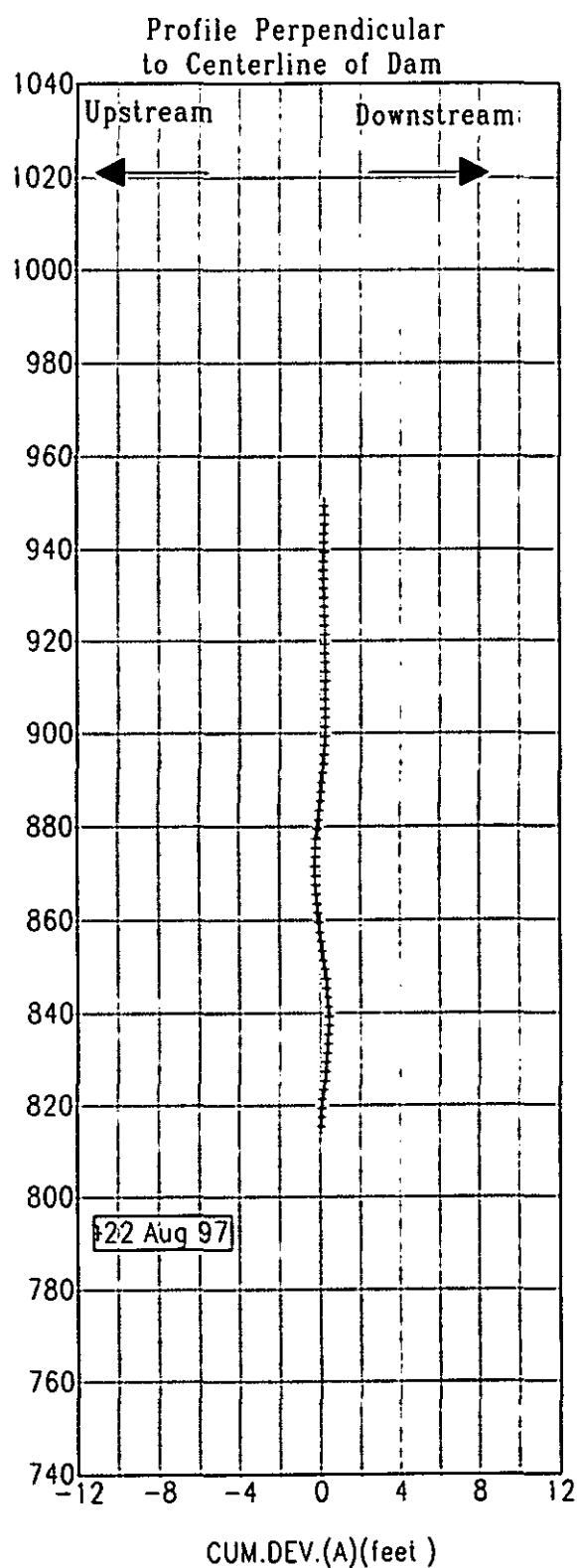
Elevation in feet, NGVD | Corrected for Spiral, Orientation



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CORPS OF ENGINEERS
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BALL MOUNTAIN DAM
JAMAICA, VERMONT
INCLINOMETER IC-96-4 AUG. 1997

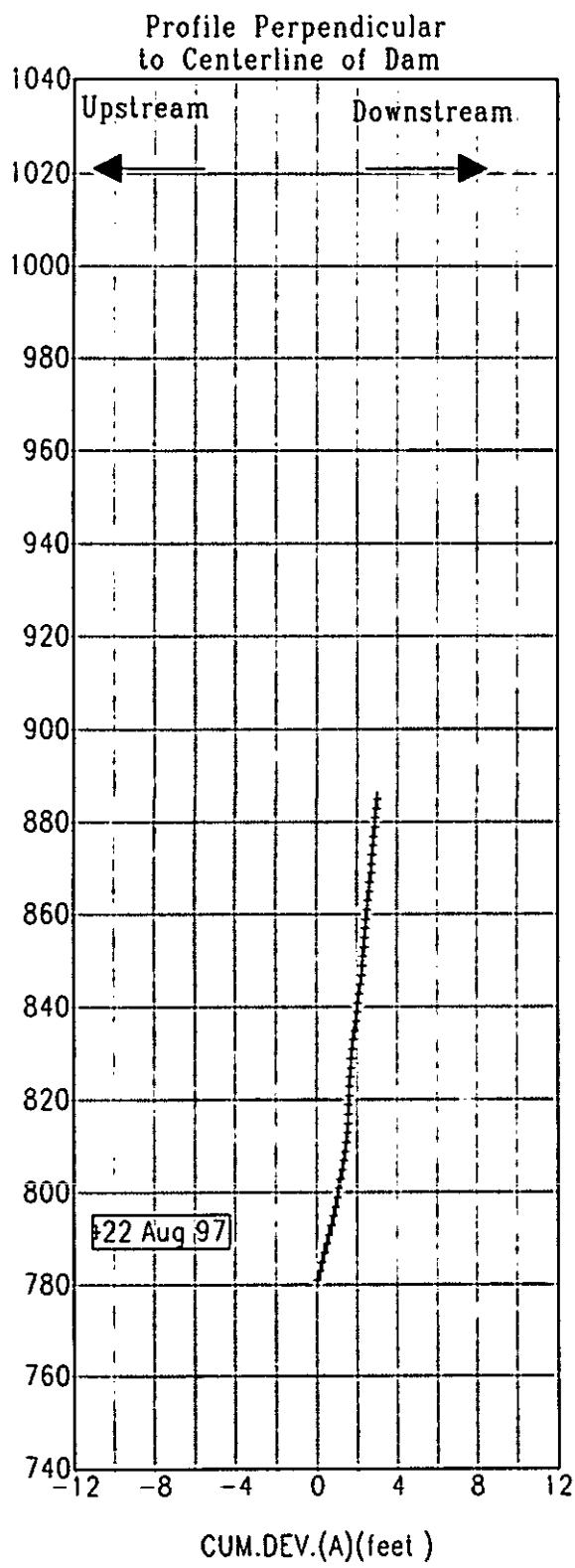
Elevation in feet, NGVD | Corrected for Spiral, Orientation



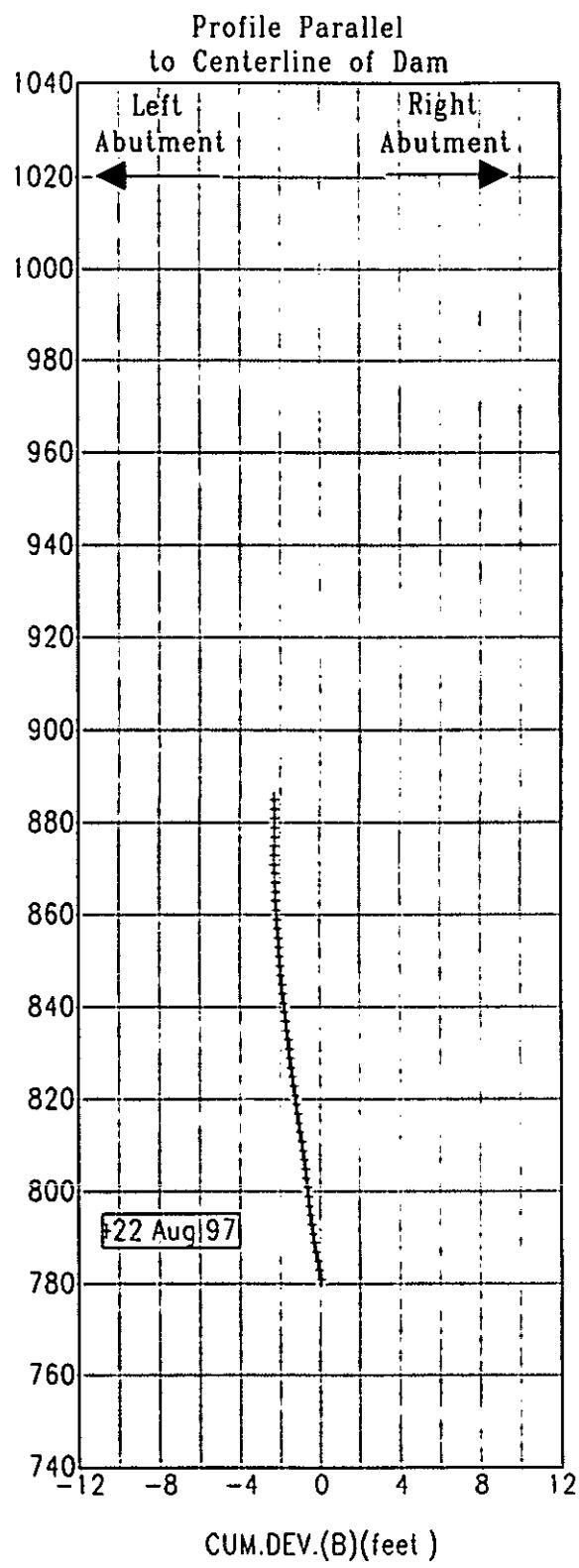
DEPARTMENT OF THE ARMY
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CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS

BALL MOUNTAIN DAM
JAMAICA, VERMONT
INCLINOMETER IC-96-5 AUG. 1997

Elevation in feet, NGVD | Corrected for Spiral,Orientation



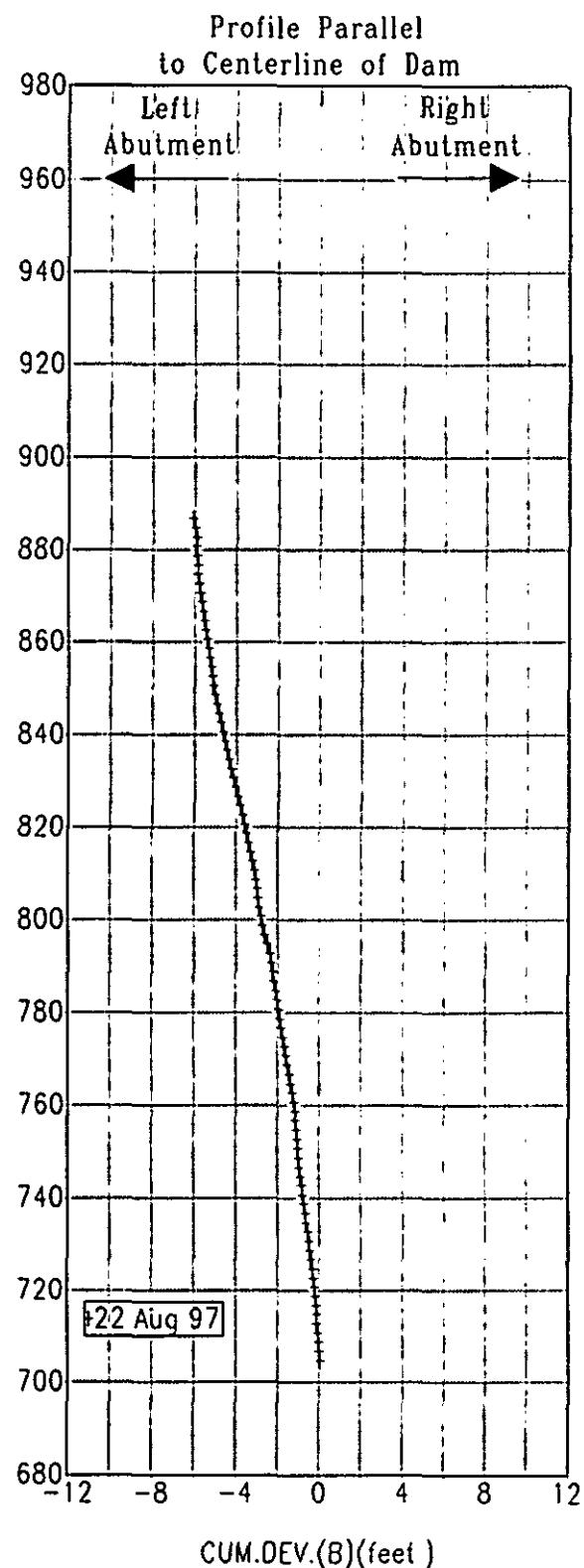
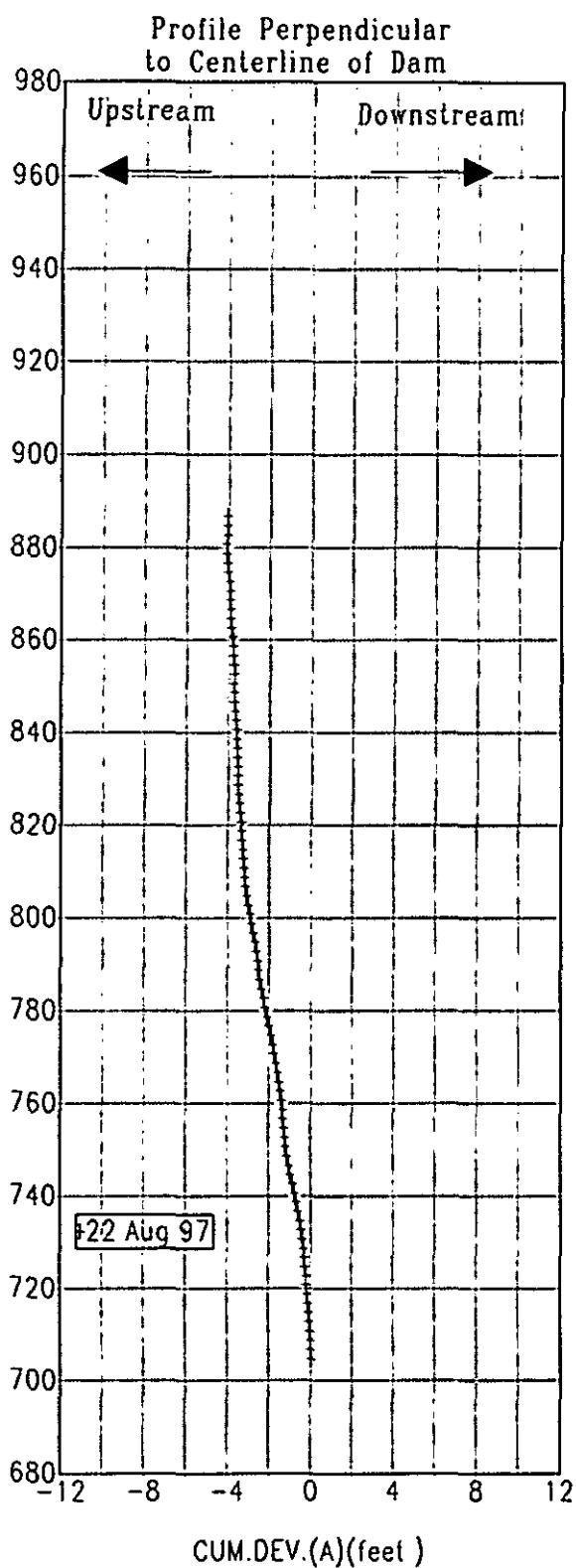
Elevation in feet, NGVD | Corrected for Spiral,Orientation



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BALL MOUNTAIN DAM
JAMAICA, VERMONT
INCLINOMETER IC-96-6 AUG. 1997

Elevation in feet, NGVD | Corrected for Spiral, Orientation



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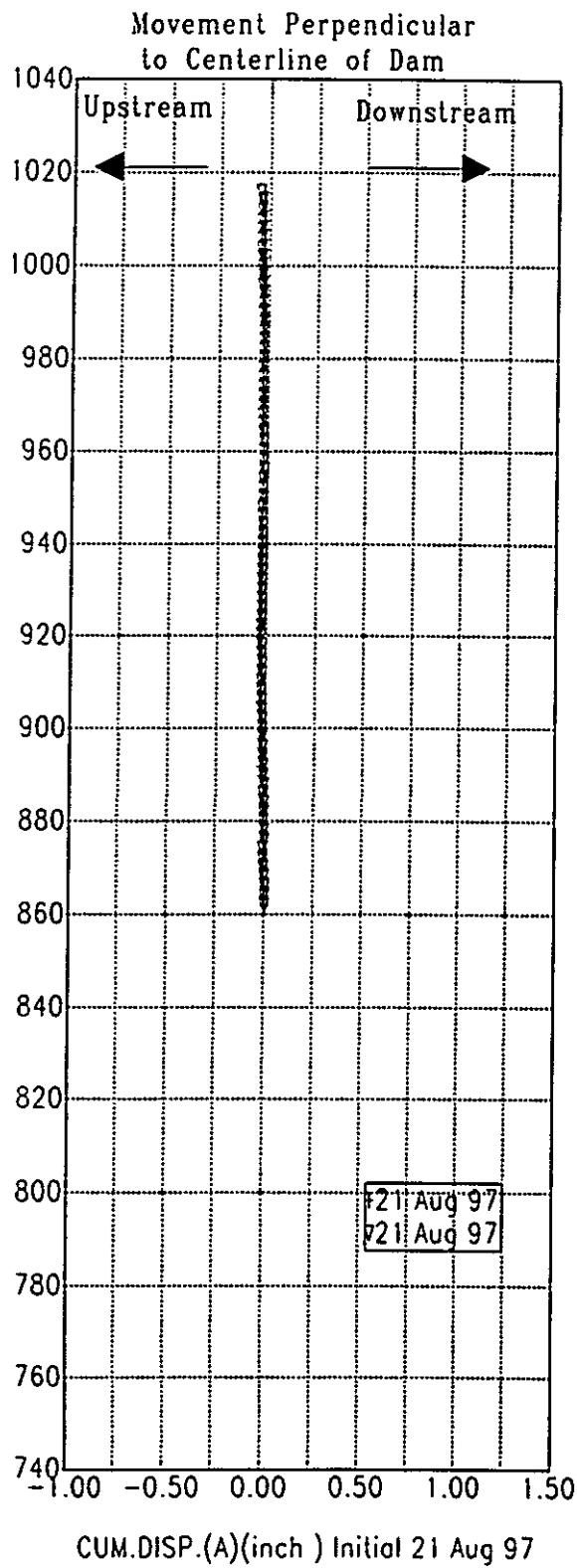
BALL MOUNTAIN DAM
JAMAICA, VERMONT

INCLINOMETER IC-96-7 AUG. 1997

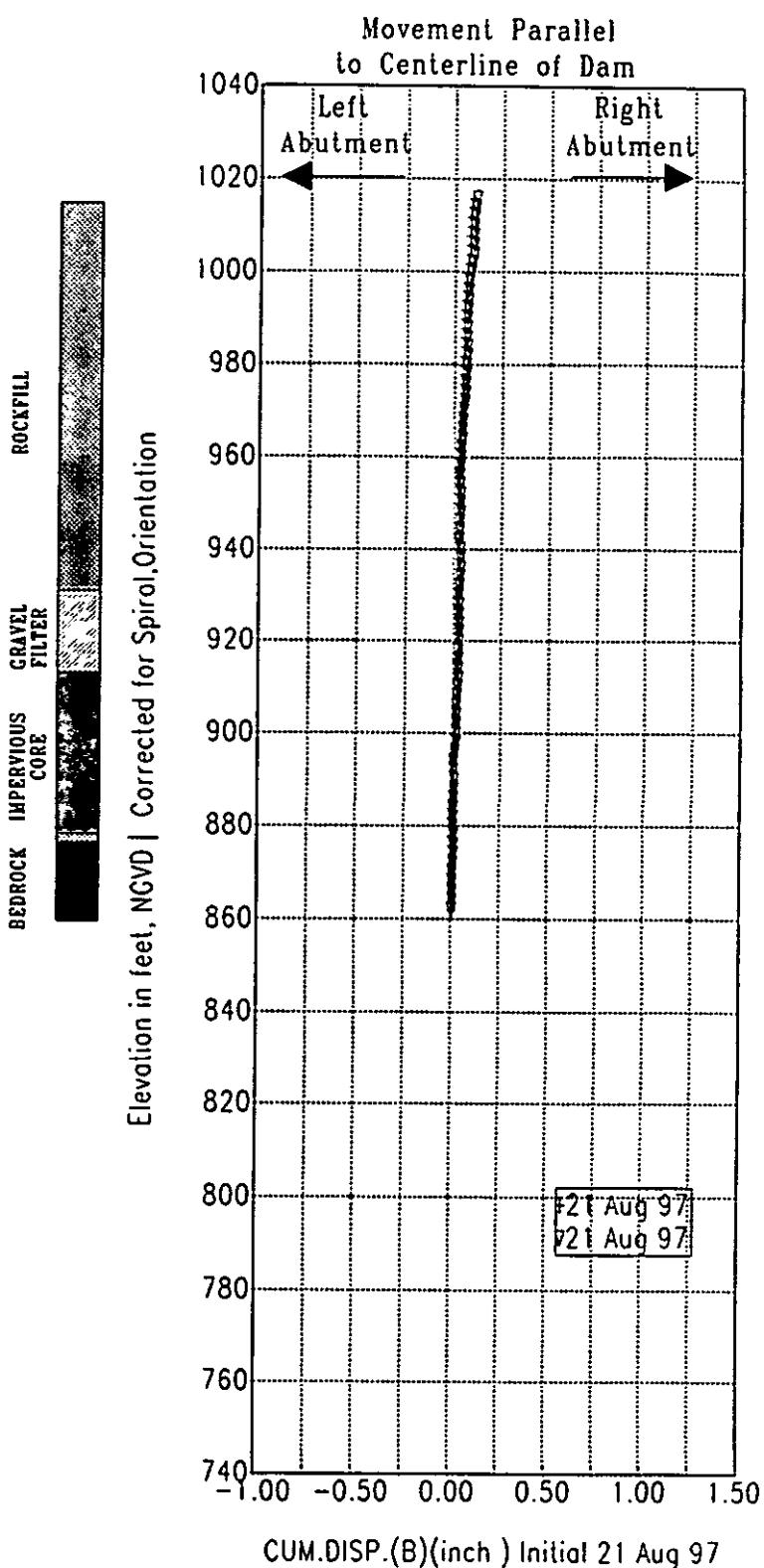
Appendix A.2

**Plots of Cumulative Differences Between the Three
Initial Data Sets for Each Inclinometer**

Elevation in feet, NGVD | Corrected for Spiral,Orientation



CUM.DISP.(A)(inch) Initial 21 Aug 97



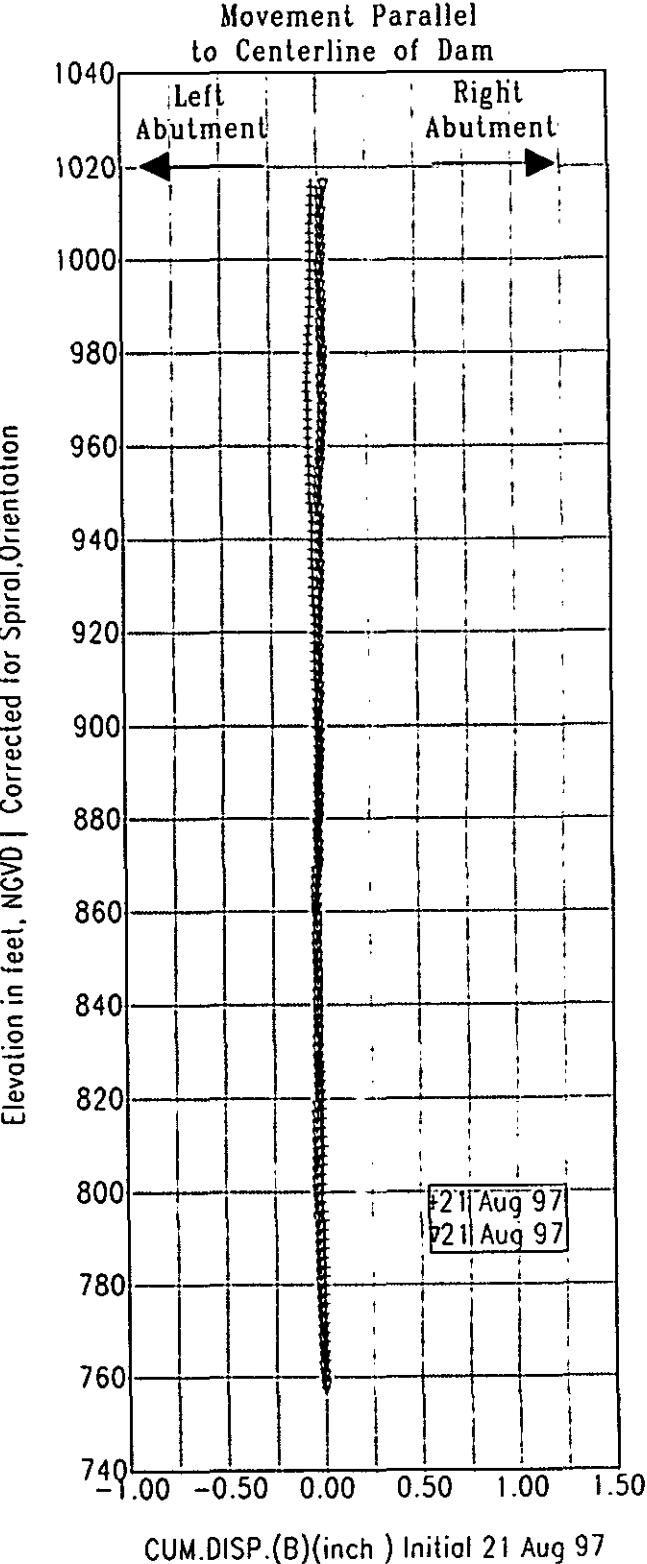
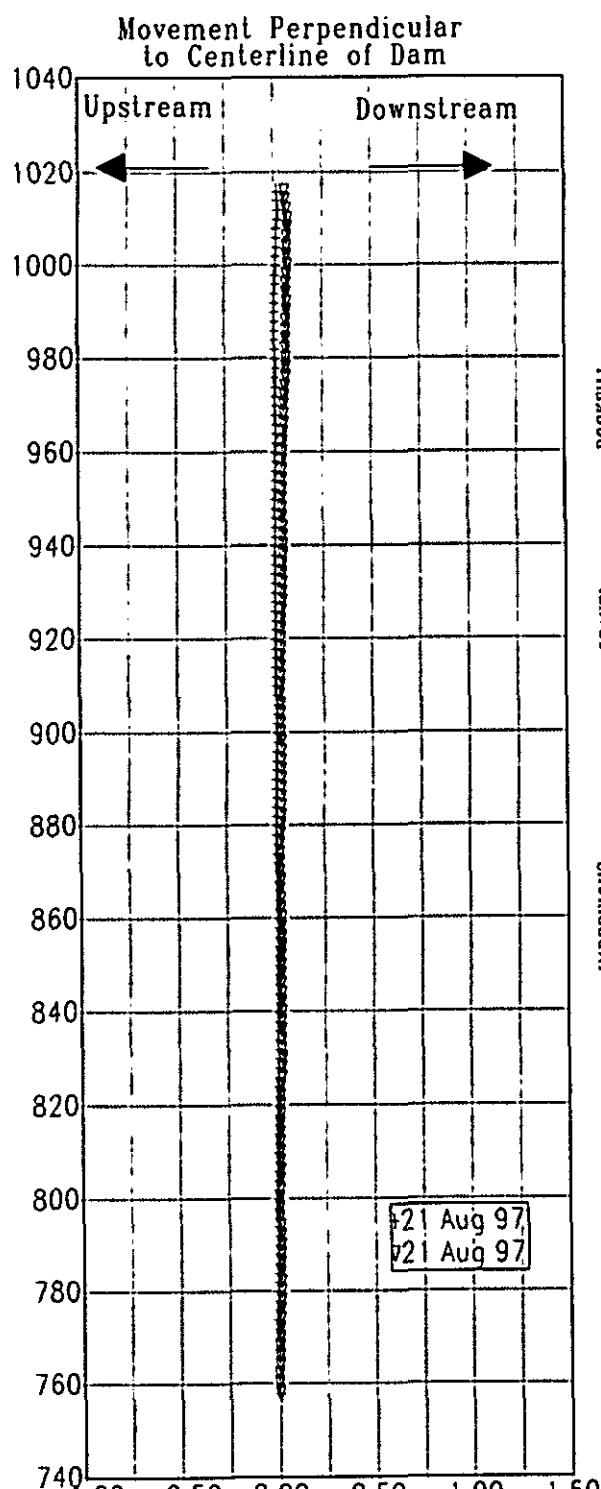
CUM.DISP.(B)(inch) Initial 21 Aug 97

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BALL MOUNTAIN DAM
JAMAICA, VERMONT

INCLINOMETER IC-96- 1 AUG. 1997

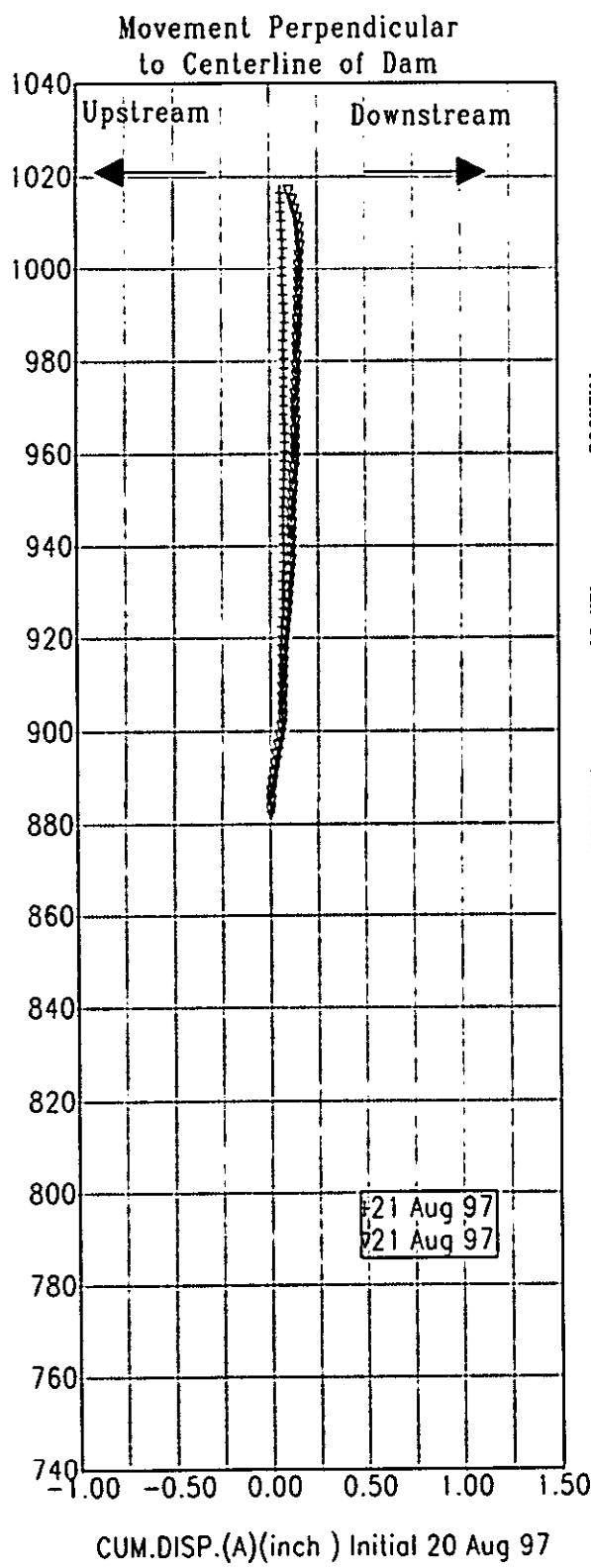
Elevation in feet, NGVD | Corrected for Spiral, Orientation



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CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS

BALL MOUNTAIN DAM
JAMAICA, VERMONT
INCLINOMETER IC-96-2 AUG. 1997

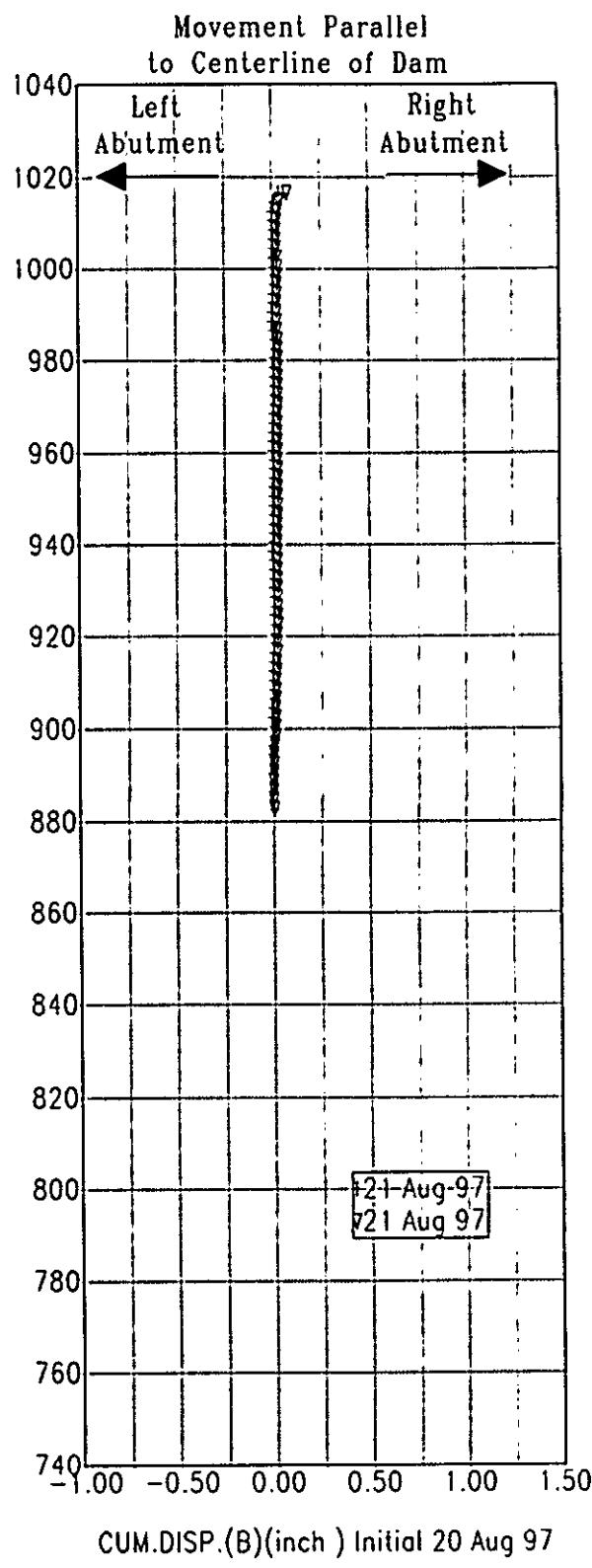
Elevation in feet (NGVD) | Corrected for Spiral, Orientation



BEDROCK NAT. GRAVEL FILTER



Elevation in feet (NGVD) | Corrected for Spiral, Orientation

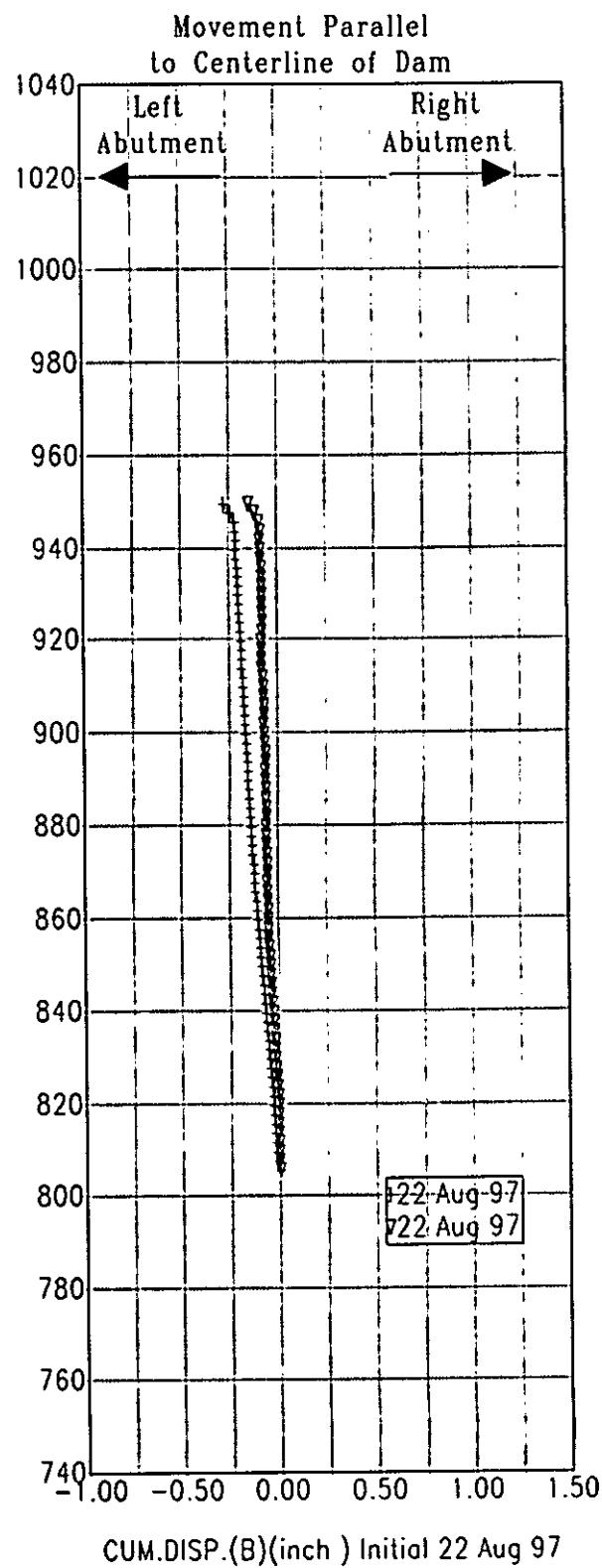
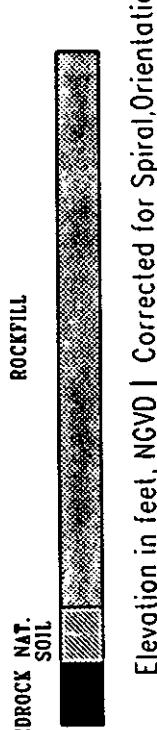
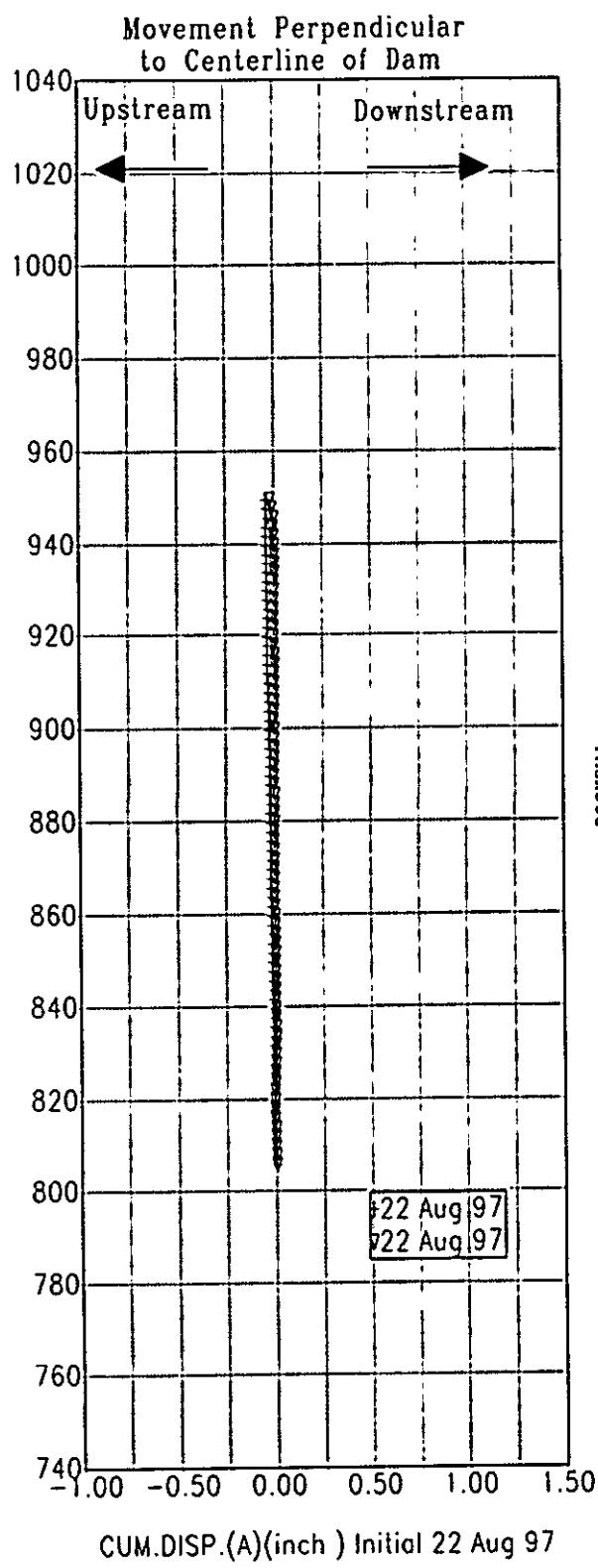


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BALL MOUNTAIN DAM
JAMAICA, VERMONT

INCLINOMETER IC-96-3 AUG. 1997

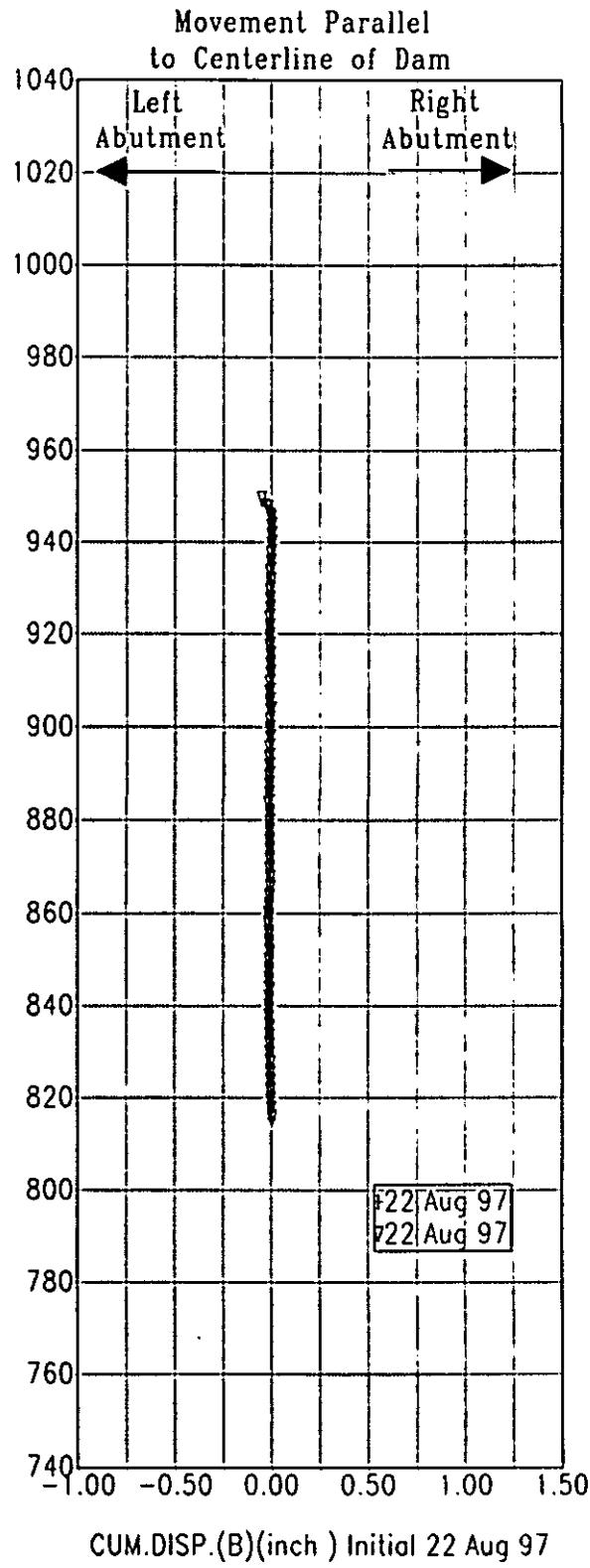
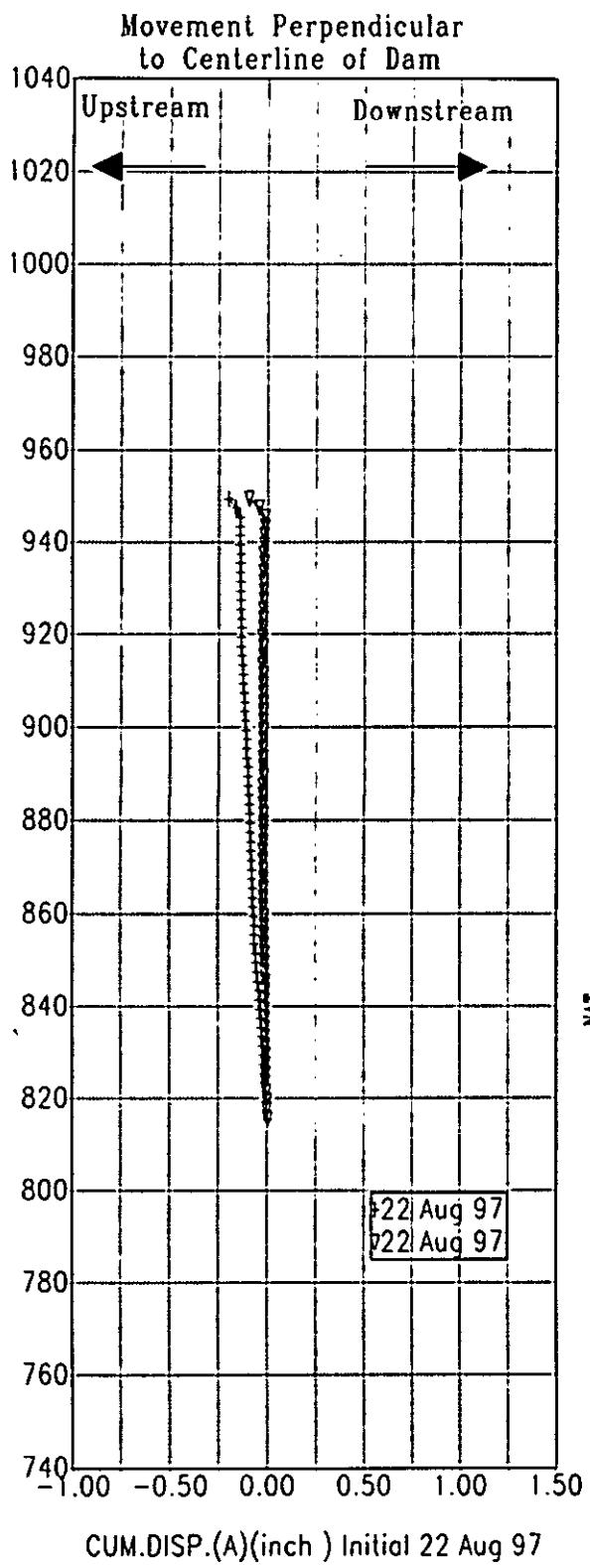
Elevation in feet, NGVD | Corrected for Spiral Orientation



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NEW ENGLAND DISTRICT
CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS

BALL MOUNTAIN DAM
JAMAICA, VERMONT
INCLINOMETER IC-96-4 AUG. 1997

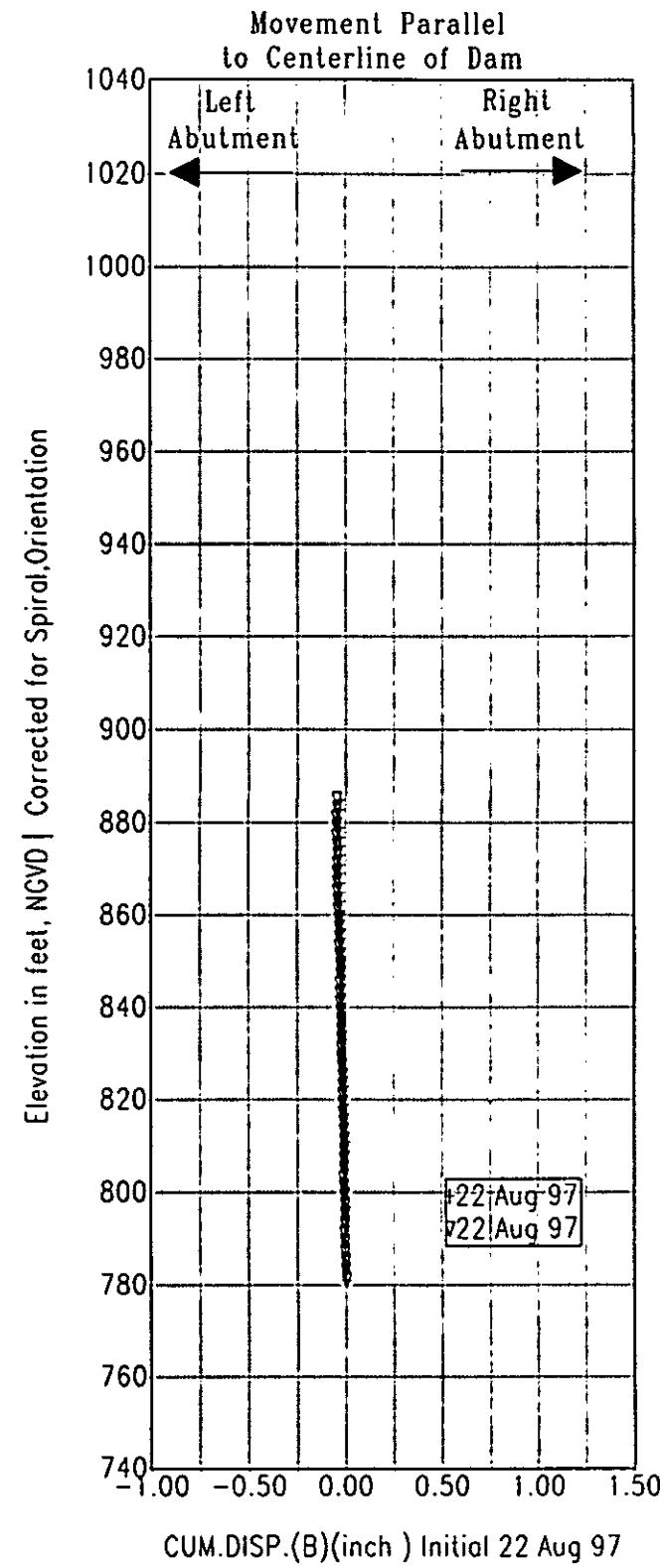
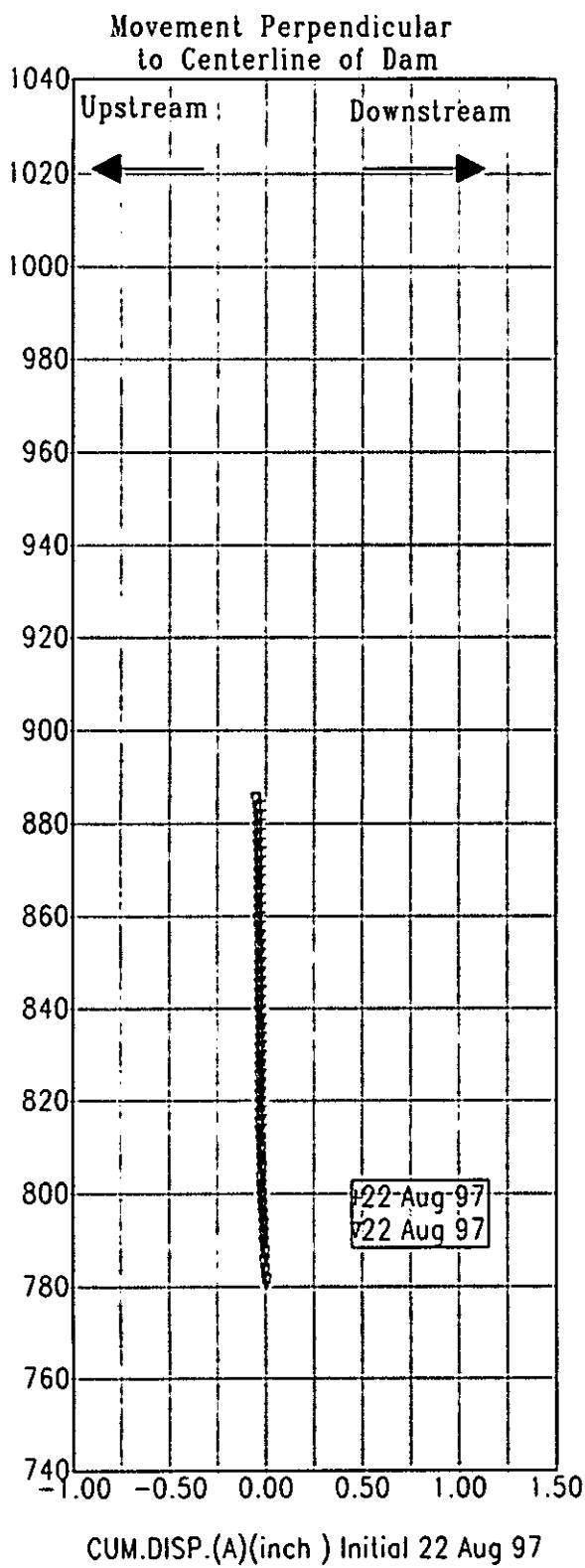
Elevation in feet, NGVD | Corrected for Spiral, Orientation



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CORPS OF ENGINEERS
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BALL MOUNTAIN DAM
JAMAICA, VERMONT
INCLINOMETER IC-96-5 AUG. 1997

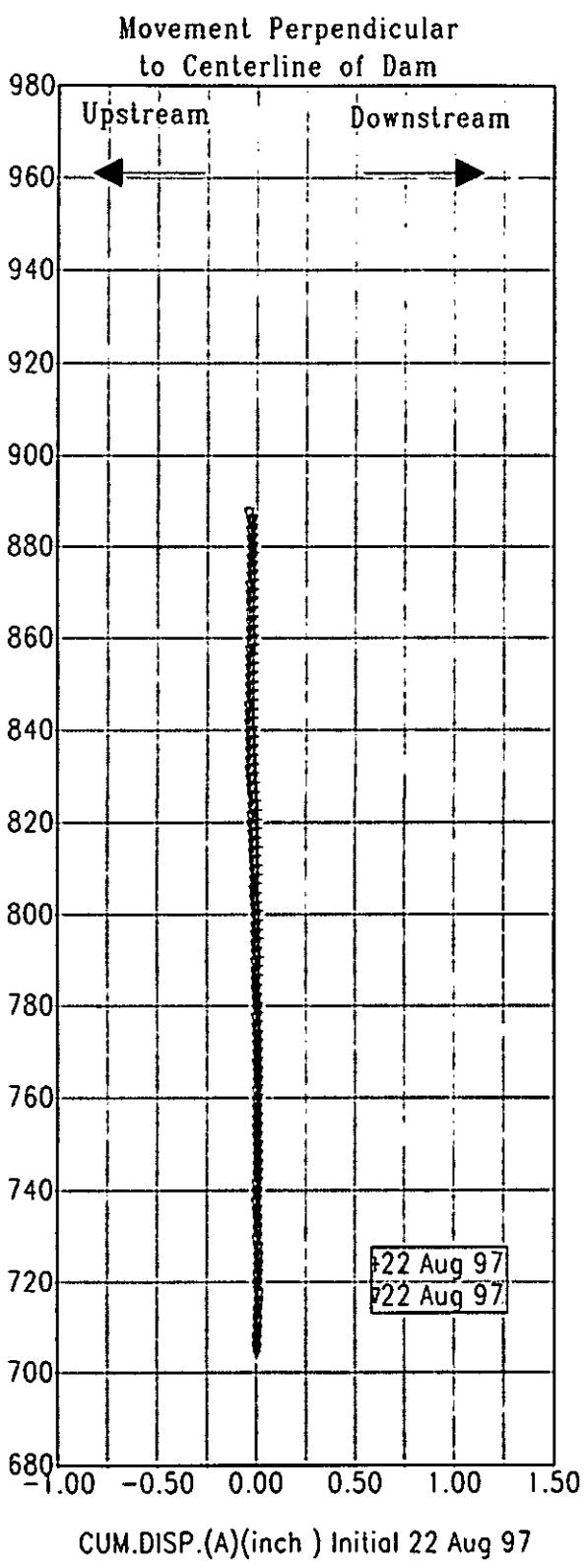
Elevation in feet, NGVD | Corrected for Spiral, Orientation



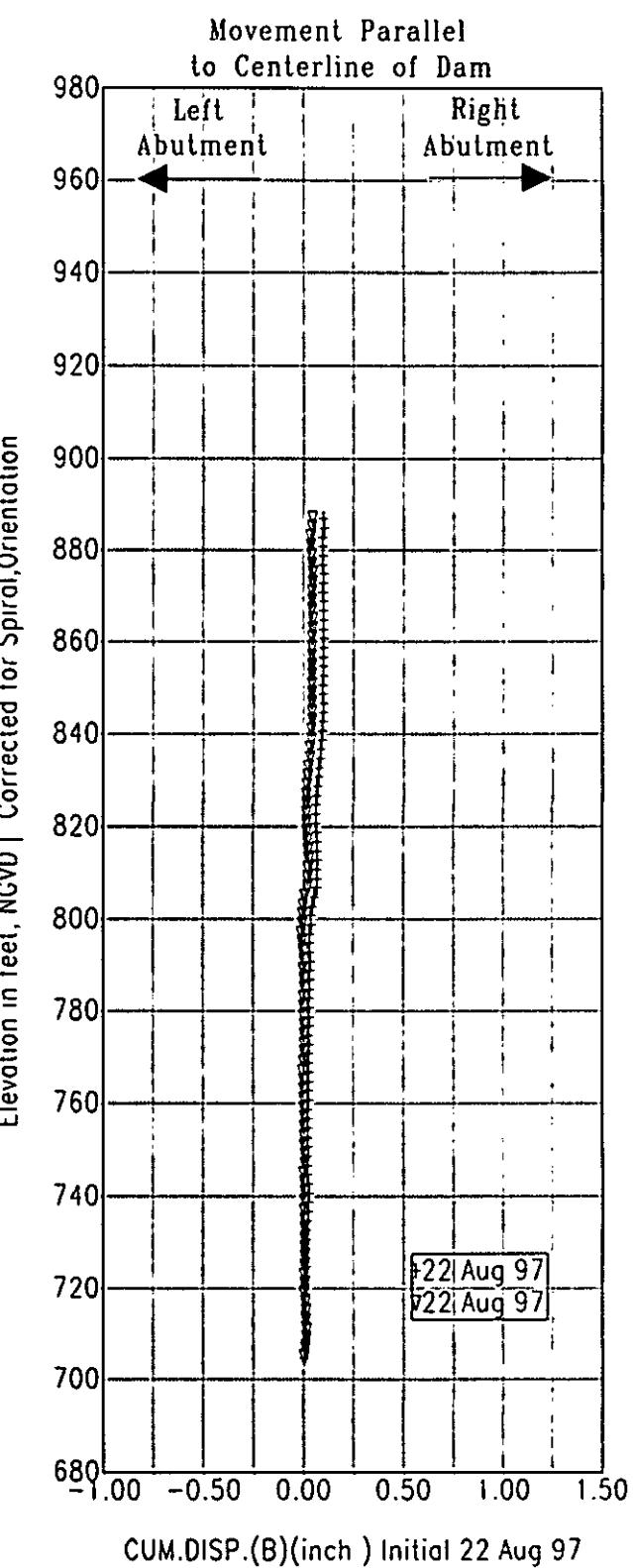
DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT
CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS

BALL MOUNTAIN DAM
JAMAICA, VERMONT
INCLINOMETER IC-96-6 | AUG. 1997

Elevation in feet, NGVD | Corrected for Spiral, Orientation



CUM.DISP.(A)(inch) Initial 22 Aug 97



CUM.DISP.(B)(inch) Initial 22 Aug 97

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CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS

BALL MOUNTAIN DAM
JAMAICA, VERMONT

INCLINOMETER IC-96-7 AUG. 1997

APPENDIX B

Tabular Print Outs of the Initial Readings

INCLINOMETER IC-96-1

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

1

27747B

08/21/97 12:36

77

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
2.000	-890	831	-1.0326	-47.7954
4.000	-833	774	-0.9642	-46.7628
6.000	-845	787	-0.9792	-45.7986
8.000	-893	835	-1.0368	-44.8194
10.000	-894	837	-1.0386	-43.7826
12.000	-788	728	-0.9096	-42.7440
14.000	-788	729	-0.9102	-41.8344
16.000	-790	730	-0.9120	-40.9242
18.000	-781	718	-0.8994	-40.0122
20.000	-778	717	-0.8970	-39.1128
22.000	-723	663	-0.8316	-38.2158
24.000	-632	572	-0.7224	-37.3842
26.000	-539	484	-0.6138	-36.6618
28.000	-557	502	-0.6354	-36.0480
30.000	-610	553	-0.6978	-35.4126
32.000	-664	608	-0.7632	-34.7148
34.000	-681	624	-0.7830	-33.9516
36.000	-626	570	-0.7176	-33.1686
38.000	-602	546	-0.6888	-32.4510
40.000	-630	569	-0.7194	-31.7622
42.000	-646	587	-0.7398	-31.0428
44.000	-653	594	-0.7482	-30.3030
46.000	-645	586	-0.7386	-29.5548
48.000	-671	613	-0.7704	-28.8162
50.000	-714	651	-0.8190	-28.0458
52.000	-667	603	-0.7620	-27.2268
54.000	-631	568	-0.7194	-26.4648
56.000	-568	510	-0.6468	-25.7454
58.000	-561	505	-0.6396	-25.0986
60.000	-515	457	-0.5832	-24.4590
62.000	-439	379	-0.4908	-23.8758
64.000	-347	288	-0.3810	-23.3850
66.000	-393	334	-0.4362	-23.0040
68.000	-533	476	-0.6054	-22.5678
70.000	-622	563	-0.7110	-21.9624
72.000	-595	538	-0.6798	-21.2514
74.000	-563	504	-0.6402	-20.5716
76.000	-545	486	-0.6186	-19.9314
78.000	-557	498	-0.6330	-19.3128
80.000	-533	480	-0.6078	-18.6798
82.000	-529	475	-0.6024	-18.0720
84.000	-537	481	-0.6108	-17.4696
86.000	-535	474	-0.6054	-16.8588

A

L

MEAN	STD DEV.	MEAN	STD DEV.
-56.9	4.2	-85.1	5.7

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

1

SENSOR #

27747B

DATE

08/21/97 12:36

READINGS PER DIRECTION

77

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR.DEV	
88.000	-530	469	-0.5994	-16.2534
90.000	-535	482	-0.6102	-15.6540
92.000	-531	481	-0.6072	-15.0438
94.000	-501	453	-0.5724	-14.4366
96.000	-489	437	-0.5556	-13.8642
98.000	-431	378	-0.4854	-13.3086
100.000	-381	318	-0.4194	-12.8232
102.000	-343	283	-0.3756	-12.4038
104.000	-322	270	-0.3552	-12.0282
106.000	-341	285	-0.3756	-11.6730
108.000	-405	341	-0.4476	-11.2974
110.000	-492	431	-0.5538	-10.8498
112.000	-513	452	-0.5790	-10.2960
114.000	-511	449	-0.5760	-9.7170
116.000	-479	423	-0.5412	-9.1410
118.000	-483	431	-0.5484	-8.5998
120.000	-639	589	-0.7368	-8.0514
122.000	-700	643	-0.8058	-7.3146
124.000	-725	671	-0.8376	-6.5088
126.000	-715	661	-0.8256	-5.6712
128.000	-707	662	-0.8214	-4.8456
130.000	-716	663	-0.8274	-4.0242
132.000	-649	593	-0.7452	-3.1968
134.000	-547	493	-0.6240	-2.4516
136.000	-464	412	-0.5256	-1.8276
138.000	-458	401	-0.5154	-1.3020
140.000	-457	412	-0.5214	-0.7866
142.000	-347	299	-0.3876	-0.2652
144.000	-263	209	-0.2832	0.1224
146.000	-171	111	-0.1692	0.4056
148.000	-7	-53	0.0276	0.5748
150.000		81	-0.135	0.5472
152.000		147	-0.208	0.4176
154.000		147	-0.194	0.2046

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

1

27747B

08/21/97 12:36

77

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
2.000	-85	7	-0.0552	-109.6440
4.000	-184	98	-0.1692	-109.5888
6.000	-265	185	-0.2700	-109.4196
8.000	-365	287	-0.3912	-109.1496
10.000	-461	367	-0.4968	-108.7584
12.000	-627	549	-0.7056	-108.2616
14.000	-716	631	-0.8082	-107.5560
16.000	-721	642	-0.8178	-106.7478
18.000	-708	628	-0.8016	-105.9300
20.000	-731	655	-0.8316	-105.1284
22.000	-735	655	-0.8340	-104.2968
24.000	-788	707	-0.8970	-103.4628
26.000	-830	742	-0.9432	-102.5658
28.000	-723	618	-0.8046	-101.6226
30.000	-543	465	-0.6048	-100.8180
32.000	-383	301	-0.4104	-100.2132
34.000	-272	192	-0.2784	-99.8028
36.000	-227	142	-0.2214	-99.5244
38.000	-261	182	-0.2658	-99.3030
40.000	-271	190	-0.2766	-99.0372
42.000	-340	264	-0.3624	-98.7606
44.000	-470	387	-0.5142	-98.3982
46.000	-521	441	-0.5772	-97.8840
48.000	-583	509	-0.6552	-97.3068
50.000	-677	601	-0.7668	-96.6516
52.000	-794	717	-0.9066	-95.8848
54.000	-937	861	-1.0788	-94.9782
56.000	-1022	933	-1.1730	-93.8994
58.000	-1013	930	-1.1658	-92.7264
60.000	-1019	933	-1.1712	-91.5606
62.000	-1077	990	-1.2402	-90.3894
64.000	-1043	957	-1.2000	-89.1492
66.000	-1057	986	-1.2258	-87.9492
68.000	-1174	1087	-1.3566	-86.7234
70.000	-1209	1123	-1.3992	-85.3668
72.000	-1210	1123	-1.3998	-83.9676
74.000	-1233	1146	-1.4274	-82.5678
76.000	-1284	1194	-1.4868	-81.1404
78.000	-1325	1236	-1.5366	-79.6536
80.000	-1335	1246	-1.5486	-78.1170
82.000	-1293	1205	-1.4988	-76.5684
84.000	-1321	1231	-1.5312	-75.0696
86.000	-1366	1282	-1.5888	-73.5384

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

1

SENSOR #

27747B

DATE

08/21/97 12:36

READINGS PER DIRECTION

77

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
88.000	-1463	1378	-1.7046	-71.9496
90.000	-1477	1391	-1.7208	-70.2450
92.000	-1419	1336	-1.6530	-68.5242
94.000	-1325	1241	-1.5396	-66.8712
96.000	-1248	1165	-1.4478	-65.3316
98.000	-1176	1089	-1.3590	-63.8838
100.000	-1204	1118	-1.3932	-62.5248
102.000	-1279	1194	-1.4838	-61.1316
104.000	-1330	1243	-1.5438	-59.6478
106.000	-1273	1183	-1.4736	-58.1040
108.000	-1327	1247	-1.5444	-56.6304
110.000	-1497	1409	-1.7436	-55.0860
112.000	-1688	1602	-1.9740	-53.3424
114.000	-1751	1666	-2.0502	-51.3684
116.000	-1759	1668	-2.0562	-49.3182
118.000	-1777	1695	-2.0832	-47.2620
120.000	-1787	1697	-2.0904	-45.1788
122.000	-1889	1800	-2.2134	-43.0884
124.000	-1966	1874	-2.3040	-40.8750
126.000	-2013	1922	-2.3610	-38.5710
128.000	-2029	1933	-2.3772	-36.2100
130.000	-2067	1979	-2.4276	-33.8328
132.000	-2105	2019	-2.4744	-31.4052
134.000	-2202	2115	-2.5902	-28.9308
136.000	-2235	2145	-2.6280	-26.3406
138.000	-2197	2102	-2.5794	-23.7126
140.000	-2149	2062	-2.5266	-21.1332
142.000	-2145	2050	-2.5170	-18.6066
144.000	-2145	2055	-2.5200	-16.0896
146.000	-2166	2081	-2.5482	-13.5696
148.000	-2279	2187	-2.6796	-11.0214
150.000	-2294	2207	-2.7006	-8.3418
152.000	-2363	2282	-2.7870	-5.6412
154.000	-2424	2333	-2.8542	-2.8542

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 13:14

READINGS PER DIRECTION

77

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
2.000	-891	826	-1.0302	-47.8284
4.000	-834	777	-0.9666	-46.7982
6.000	-845	787	-0.9792	-45.8316
8.000	-894	835	-1.0374	-44.8524
10.000	-895	838	-1.0398	-43.8150
12.000	-790	729	-0.9114	-42.7752
14.000	-788	731	-0.9114	-41.8638
16.000	-789	734	-0.9138	-40.9524
18.000	-779	720	-0.8994	-40.0386
20.000	-777	718	-0.8970	-39.1392
22.000	-723	665	-0.8328	-38.2422
24.000	-632	571	-0.7218	-37.4094
26.000	-543	485	-0.6168	-36.6876
28.000	-558	502	-0.6360	-36.0708
30.000	-609	554	-0.6978	-35.4348
32.000	-662	607	-0.7614	-34.7370
34.000	-680	624	-0.7824	-33.9756
36.000	-627	570	-0.7182	-33.1932
38.000	-601	545	-0.6876	-32.4750
40.000	-630	570	-0.7200	-31.7874
42.000	-646	587	-0.7398	-31.0674
44.000	-653	596	-0.7494	-30.3276
46.000	-645	587	-0.7392	-29.5782
48.000	-670	611	-0.7686	-28.8390
50.000	-713	651	-0.8184	-28.0704
52.000	-667	607	-0.7644	-27.2520
54.000	-629	572	-0.7206	-26.4876
56.000	-567	511	-0.6468	-25.7670
58.000	-561	507	-0.6408	-25.1202
60.000	-515	458	-0.5838	-24.4794
62.000	-437	377	-0.4884	-23.8956
64.000	-346	287	-0.3798	-23.4072
66.000	-392	334	-0.4356	-23.0274
68.000	-533	473	-0.6036	-22.5918
70.000	-620	564	-0.7104	-21.9882
72.000	-596	537	-0.6798	-21.2778
74.000	-561	504	-0.6390	-20.5980
76.000	-544	487	-0.6186	-19.9590
78.000	-555	497	-0.6312	-19.3404
80.000	-534	481	-0.6090	-18.7092
82.000	-528	476	-0.6024	-18.1002
84.000	-536	480	-0.6096	-17.4978
86.000	-534	477	-0.6066	-16.8882

A

MEAN

STD. DEV.

-56.0

3.7

B

MEAN

STD. DEV.

-56.1

5.2

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

[PREVIOUS]

[CURRENT]

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 13:14

READINGS PER DIRECTION

77

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV.	
88.000	-527	471	-0.5988	-16.2816
90.000	-535	482	-0.6102	-15.6828
92.000	-529	481	-0.6060	-15.0726
94.000	-501	450	-0.5706	-14.4666
96.000	-489	437	-0.5556	-13.8960
98.000	-431	379	-0.4860	-13.3404
100.000	-381	320	-0.4206	-12.8544
102.000	-346	286	-0.3792	-12.4338
104.000	-327	270	-0.3582	-12.0546
106.000	-339	283	-0.3732	-11.6964
108.000	-403	340	-0.4458	-11.3232
110.000	-492	433	-0.5550	-10.8774
112.000	-513	454	-0.5802	-10.3224
114.000	-510	455	-0.5790	-9.7422
116.000	-479	426	-0.5430	-9.1632
118.000	-482	430	-0.5472	-8.6202
120.000	-645	589	-0.7404	-8.0730
122.000	-698	643	-0.8046	-7.3326
124.000	-723	671	-0.8364	-6.5280
126.000	-714	665	-0.8274	-5.6916
128.000	-714	670	-0.8304	-4.8642
130.000	-715	661	-0.8256	-4.0338
132.000	-649	596	-0.7470	-3.2082
134.000	-547	493	-0.6240	-2.4612
136.000	-466	414	-0.5280	-1.8372
138.000	-457	402	-0.5154	-1.3092
140.000	-460	412	-0.5232	-0.7938
142.000	-349	297	-0.3876	-0.2706
144.000	-264	208	-0.2832	0.1170
146.000	-172	115	-0.1722	0.4002
148.000	-5	-49	0.0264	0.5724
150.000		82	-0.131	0.5460
152.000		153	-0.204	0.4182
154.000		142	-0.198	0.2040

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 13:14

READINGS PER DIRECTION

77

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
2.000	-83	-3	-0.0480	-109.5546
4.000	-179	97	-0.1656	-109.5066
6.000	-263	186	-0.2694	-109.3410
8.000	-362	286	-0.3888	-109.0716
10.000	-461	366	-0.4962	-108.6828
12.000	-627	547	-0.7044	-108.1866
14.000	-715	624	-0.8034	-107.4822
16.000	-721	630	-0.8106	-106.6788
18.000	-705	625	-0.7980	-105.8682
20.000	-730	654	-0.8304	-105.0702
22.000	-730	653	-0.8298	-104.2398
24.000	-786	703	-0.8934	-103.4100
26.000	-829	741	-0.9420	-102.5166
28.000	-723	619	-0.8052	-101.5746
30.000	-545	465	-0.6060	-100.7694
32.000	-383	302	-0.4110	-100.1634
34.000	-273	189	-0.2772	-99.7524
36.000	-225	137	-0.2172	-99.4752
38.000	-262	179	-0.2646	-99.2580
40.000	-274	188	-0.2772	-98.9934
42.000	-341	262	-0.3618	-98.7162
44.000	-468	383	-0.5106	-98.3544
46.000	-518	434	-0.5712	-97.8438
48.000	-582	505	-0.6522	-97.2726
50.000	-677	598	-0.7650	-96.6204
52.000	-795	715	-0.9060	-95.8554
54.000	-944	854	-1.0788	-94.9494
56.000	-1021	933	-1.1724	-93.8706
58.000	-1012	927	-1.1634	-92.6982
60.000	-1017	930	-1.1682	-91.5348
62.000	-1079	991	-1.2420	-90.3666
64.000	-1047	959	-1.2036	-89.1246
66.000	-1059	983	-1.2252	-87.9210
68.000	-1175	1089	-1.3584	-86.6958
70.000	-1207	1122	-1.3974	-85.3374
72.000	-1209	1123	-1.3992	-83.9400
74.000	-1233	1143	-1.4256	-82.5408
76.000	-1288	1198	-1.4916	-81.1152
78.000	-1326	1238	-1.5384	-79.6236
80.000	-1335	1249	-1.5504	-78.0852
82.000	-1292	1203	-1.4970	-76.5348
84.000	-1317	1229	-1.5276	-75.0378
86.000	-1362	1277	-1.5834	-73.5102

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

[PREVIOUS]

[CURRENT]

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 13:14

READINGS PER DIRECTION

77

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR.DEV	
88.000	-1465	1373	-1.7028	-71.9268
90.000	-1479	1391	-1.7220	-70.2240
92.000	-1420	1337	-1.6542	-68.5020
94.000	-1327	1242	-1.5414	-66.8478
96.000	-1249	1162	-1.4466	-65.3064
98.000	-1176	1089	-1.3590	-63.8598
100.000	-1202	1113	-1.3890	-62.5008
102.000	-1283	1193	-1.4856	-61.1118
104.000	-1329	1243	-1.5432	-59.6262
106.000	-1271	1184	-1.4730	-58.0830
108.000	-1325	1247	-1.5432	-56.6100
110.000	-1493	1406	-1.7394	-55.0668
112.000	-1687	1598	-1.9710	-53.3274
114.000	-1753	1663	-2.0496	-51.3564
116.000	-1761	1669	-2.0580	-49.3068
118.000	-1777	1695	-2.0832	-47.2488
120.000	-1777	1693	-2.0820	-45.1656
122.000	-1887	1799	-2.2116	-43.0836
124.000	-1966	1874	-2.3040	-40.8720
126.000	-2014	1928	-2.3652	-38.5680
128.000	-2027	1925	-2.3712	-36.2028
130.000	-2065	1981	-2.4276	-33.8316
132.000	-2102	2015	-2.4702	-31.4040
134.000	-2201	2114	-2.5890	-28.9338
136.000	-2233	2146	-2.6274	-26.3448
138.000	-2199	2104	-2.5818	-23.7174
140.000	-2150	2064	-2.5284	-21.1356
142.000	-2144	2056	-2.5200	-18.6072
144.000	-2143	2055	-2.5188	-16.0872
146.000	-2161	2079	-2.5440	-13.5684
148.000	-2278	2187	-2.6790	-11.0244
150.000	-2294	2207	-2.7006	-8.3454
152.000	-2369	2280	-2.7894	-5.6448
154.000	-2425	2334	-2.8554	-2.8554

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 13:47

READINGS PER DIRECTION

77

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR.DEV	
2.000	-895	834	-1.0374	-47.8476
4.000	-834	776	-0.9660	-46.8102
6.000	-845	787	-0.9792	-45.8442
8.000	-895	834	-1.0374	-44.8650
10.000	-896	836	-1.0392	-43.8276
12.000	-790	727	-0.9102	-42.7884
14.000	-789	731	-0.9120	-41.8782
16.000	-790	734	-0.9144	-40.9662
18.000	-781	722	-0.9018	-40.0518
20.000	-779	718	-0.8982	-39.1500
22.000	-725	663	-0.8328	-38.2518
24.000	-633	571	-0.7224	-37.4190
26.000	-543	485	-0.6168	-36.6966
28.000	-558	504	-0.6372	-36.0798
30.000	-610	554	-0.6984	-35.4426
32.000	-663	607	-0.7620	-34.7442
34.000	-681	623	-0.7824	-33.9822
36.000	-627	570	-0.7182	-33.1998
38.000	-603	545	-0.6888	-32.4816
40.000	-630	570	-0.7200	-31.7928
42.000	-646	587	-0.7398	-31.0728
44.000	-653	595	-0.7488	-30.3330
46.000	-645	586	-0.7386	-29.5842
48.000	-670	612	-0.7692	-28.8456
50.000	-715	652	-0.8202	-28.0764
52.000	-667	607	-0.7644	-27.2562
54.000	-631	571	-0.7212	-26.4918
56.000	-567	511	-0.6468	-25.7706
58.000	-562	507	-0.6414	-25.1238
60.000	-517	458	-0.5850	-24.4824
62.000	-439	378	-0.4902	-23.8974
64.000	-347	287	-0.3804	-23.4072
66.000	-392	334	-0.4356	-23.0268
68.000	-533	472	-0.6030	-22.5912
70.000	-621	563	-0.7104	-21.9882
72.000	-599	537	-0.6816	-21.2778
74.000	-565	504	-0.6414	-20.5962
76.000	-544	487	-0.6186	-19.9548
78.000	-555	497	-0.6312	-19.3362
80.000	-534	480	-0.6084	-18.7050
82.000	-529	475	-0.6024	-18.0966
84.000	-537	481	-0.6108	-17.4942
86.000	-536	475	-0.6066	-16.8834

A

MEAN

-56.9

STD DEV.

4.2

B

MEAN

-56.9

STD. DEV.

5.2

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 13:47

READINGS PER DIRECTION

77

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR.DEV	
88.000	-530	469	-0.5994	-16.2768
90.000	-534	483	-0.6102	-15.6774
92.000	-529	480	-0.6054	-15.0672
94.000	-501	452	-0.5718	-14.4618
96.000	-489	437	-0.5556	-13.8900
98.000	-433	378	-0.4866	-13.3344
100.000	-383	319	-0.4212	-12.8478
102.000	-343	286	-0.3774	-12.4266
104.000	-326	269	-0.3570	-12.0492
106.000	-338	283	-0.3726	-11.6922
108.000	-404	341	-0.4470	-11.3196
110.000	-493	434	-0.5562	-10.8726
112.000	-514	454	-0.5808	-10.3164
114.000	-511	452	-0.5778	-9.7356
116.000	-477	425	-0.5412	-9.1578
118.000	-483	430	-0.5478	-8.6166
120.000	-644	590	-0.7404	-8.0688
122.000	-701	646	-0.8082	-7.3284
124.000	-726	672	-0.8388	-6.5202
126.000	-715	662	-0.8262	-5.6814
128.000	-707	667	-0.8244	-4.8552
130.000	-715	662	-0.8262	-4.0308
132.000	-649	594	-0.7458	-3.2046
134.000	-548	492	-0.6240	-2.4588
136.000	-465	415	-0.5280	-1.8348
138.000	-461	401	-0.5172	-1.3068
140.000	-458	411	-0.5214	-0.7896
142.000	-342	295	-0.3822	-0.2682
144.000	-261	209	-0.2820	0.1140
146.000	-173	115	-0.1728	0.3960
148.000	-10	-49	0.0234	0.5688
150.000	79	-134	0.1278	0.5454
152.000	149	-207	0.2136	0.4176
154.000	143	-197	0.2040	0.2040

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997
 SITE: BMTDAM HOLE NUMBER IC9601
 site description Sta. 8+50, Offset 75' Downstream

DATA SET # SENSOR # DATE READINGS PER DIRECTION SENSOR: 27747B	← PREVIOUS → 3 27747B 08/21/97 13:47 77	← CURRENT →
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DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
2.000	-82	5	-0.0522	-109.5336
4.000	-177	95	-0.1632	-109.4814
6.000	-261	184	-0.2670	-109.3182
8.000	-365	285	-0.3900	-109.0512
10.000	-461	366	-0.4962	-108.6612
12.000	-629	546	-0.7050	-108.1650
14.000	-716	623	-0.8034	-107.4600
16.000	-721	630	-0.8106	-106.6566
18.000	-705	617	-0.7932	-105.8460
20.000	-729	651	-0.8280	-105.0528
22.000	-737	653	-0.8340	-104.2248
24.000	-787	701	-0.8928	-103.3908
26.000	-829	741	-0.9420	-102.4980
28.000	-721	618	-0.8034	-101.5560
30.000	-545	465	-0.6060	-100.7526
32.000	-386	300	-0.4116	-100.1466
34.000	-274	189	-0.2778	-99.7350
36.000	-226	135	-0.2166	-99.4572
38.000	-262	179	-0.2646	-99.2406
40.000	-272	187	-0.2754	-98.9760
42.000	-339	264	-0.3618	-98.7006
44.000	-468	381	-0.5094	-98.3388
46.000	-519	432	-0.5706	-97.8294
48.000	-582	503	-0.6510	-97.2588
50.000	-677	597	-0.7644	-96.6078
52.000	-794	715	-0.9054	-95.8434
54.000	-935	854	-1.0734	-94.9380
56.000	-1022	931	-1.1718	-93.8646
58.000	-1013	926	-1.1634	-92.6928
60.000	-1019	931	-1.1700	-91.5294
62.000	-1079	991	-1.2420	-90.3594
64.000	-1046	959	-1.2030	-89.1174
66.000	-1057	984	-1.2246	-87.9144
68.000	-1175	1087	-1.3572	-86.6898
70.000	-1210	1120	-1.3980	-85.3326
72.000	-1207	1122	-1.3974	-83.9346
74.000	-1235	1143	-1.4268	-82.5372
76.000	-1287	1198	-1.4910	-81.1104
78.000	-1325	1237	-1.5372	-79.6194
80.000	-1339	1248	-1.5522	-78.0822
82.000	-1291	1203	-1.4964	-76.5300
84.000	-1321	1226	-1.5282	-75.0336
86.000	-1365	1278	-1.5858	-73.5054

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9601

site description Sta. 8+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 13:47

READINGS PER DIRECTION

77

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
88.000	-1465	1378	-1.7058	-71.9196
90.000	-1478	1393	-1.7226	-70.2138
92.000	-1419	1335	-1.6524	-68.4912
94.000	-1328	1239	-1.5402	-66.8388
96.000	-1249	1160	-1.4454	-65.2986
98.000	-1177	1087	-1.3584	-63.8532
100.000	-1202	1118	-1.3920	-62.4948
102.000	-1281	1194	-1.4850	-61.1028
104.000	-1326	1243	-1.5414	-59.6178
106.000	-1272	1180	-1.4712	-58.0764
108.000	-1326	1244	-1.5420	-56.6052
110.000	-1497	1405	-1.7412	-55.0632
112.000	-1689	1601	-1.9740	-53.3220
114.000	-1752	1664	-2.0496	-51.3480
116.000	-1758	1667	-2.0550	-49.2984
118.000	-1779	1694	-2.0838	-47.2434
120.000	-1778	1692	-2.0820	-45.1596
122.000	-1888	1795	-2.2098	-43.0776
124.000	-1966	1874	-2.3040	-40.8678
126.000	-2013	1926	-2.3634	-38.5638
128.000	-2033	1930	-2.3778	-36.2004
130.000	-2067	1978	-2.4270	-33.8226
132.000	-2103	2017	-2.4720	-31.3956
134.000	-2203	2114	-2.5902	-28.9236
136.000	-2235	2146	-2.6286	-26.3334
138.000	-2196	2105	-2.5806	-23.7048
140.000	-2149	2063	-2.5272	-21.1242
142.000	-2141	2053	-2.5164	-18.5970
144.000	-2143	2053	-2.5176	-16.0806
146.000	-2163	2078	-2.5446	-13.5630
148.000	-2280	2187	-2.6802	-11.0184
150.000	-2295	2207	-2.7012	-8.3382
152.000	-2365	2280	-2.7870	-5.6370
154.000	-2419	2331	-2.8500	-2.8500

END OF RECORDS

INCLINOMETER IC-96-2

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

1

SENSOR #

27747B

DATE

08/21/97 08:13

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
2.000	340	-404	0.4464	125.0046
4.000	344	-397	0.4446	124.5582
6.000	172	-221	0.2358	124.1136
8.000	-133	81	-0.1284	123.8778
10.000	-138	85	-0.1338	124.0062
12.000	12	-66	0.0468	124.1400
14.000	72	-125	0.1182	124.0932
16.000	72	-125	0.1182	123.9750
18.000	50	-105	0.0930	123.8568
20.000	9	-62	0.0426	123.7638
22.000	-30	-23	-0.0042	123.7212
24.000	-47	-7	-0.0240	123.7254
26.000	-63	10	-0.0438	123.7494
28.000	-55	3	-0.0348	123.7932
30.000	-66	11	-0.0462	123.8280
32.000	22	-77	0.0594	123.8742
34.000	46	-101	0.0882	123.8148
36.000	106	-161	0.1602	123.7266
38.000	161	-215	0.2256	123.5664
40.000	205	-259	0.2784	123.3408
42.000	331	-386	0.4302	123.0624
44.000	391	-447	0.5028	122.6322
46.000	440	-494	0.5604	122.1294
48.000	473	-527	0.6000	121.5690
50.000	515	-565	0.6480	120.9690
52.000	575	-629	0.7224	120.3210
54.000	624	-678	0.7812	119.5986
56.000	670	-723	0.8358	118.8174
58.000	685	-739	0.8544	117.9816
60.000	708	-761	0.8814	117.1272
62.000	782	-836	0.9708	116.2458
64.000	778	-832	0.9660	115.2750
66.000	747	-799	0.9276	114.3090
68.000	703	-757	0.8760	113.3814
70.000	651	-704	0.8130	112.5054
72.000	624	-677	0.7806	111.6924
74.000	591	-643	0.7404	110.9118
76.000	554	-607	0.6966	110.1714
78.000	539	-593	0.6792	109.4748
80.000	502	-555	0.6342	108.7956
82.000	537	-591	0.6768	108.1614
84.000	535	-589	0.6744	107.4846
86.000	551	-605	0.6936	106.8102

A

B

MEAN	STD. DEY.	MEAN	STD. DEY.
-54.3	2.6	-88.6	7.2

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

1

SENSOR #

27747B

DATE

08/21/97 08:13

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR.DEV	
88.000	577	-631	0.7248	106.1166
90.000	599	-651	0.7500	105.3918
92.000	758	-813	0.9426	104.6418
94.000	825	-878	1.0218	103.6992
96.000	856	-909	1.0590	102.6774
98.000	888	-942	1.0980	101.6184
100.000	940	-991	1.1586	100.5204
102.000	1139	-1195	1.4004	99.3618
104.000	1211	-1265	1.4856	97.9614
106.000	1265	-1319	1.5504	96.4758
108.000	1311	-1366	1.6062	94.9254
110.000	1348	-1401	1.6494	93.3192
112.000	1471	-1528	1.7994	91.6698
114.000	1456	-1510	1.7796	89.8704
116.000	1406	-1459	1.7190	88.0908
118.000	1314	-1368	1.6092	86.3718
120.000	1183	-1234	1.4502	84.7626
122.000	1099	-1154	1.3518	83.3124
124.000	999	-1053	1.2312	81.9606
126.000	909	-963	1.1232	80.7294
128.000	837	-890	1.0362	79.6062
130.000	790	-843	0.9798	78.5700
132.000	833	-890	1.0338	77.5902
134.000	869	-922	1.0746	76.5564
136.000	926	-979	1.1430	75.4818
138.000	1018	-1073	1.2546	74.3388
140.000	1128	-1180	1.3848	73.0842
142.000	1227	-1277	1.5024	71.6994
144.000	1340	-1394	1.6404	70.1970
146.000	1474	-1526	1.8000	68.5566
148.000	1577	-1626	1.9218	66.7566
150.000	1593	-1645	1.9428	64.8348
152.000	1539	-1591	1.8780	62.8920
154.000	1409	-1463	1.7232	61.0140
156.000	1306	-1359	1.5990	59.2908
158.000	1120	-1171	1.3746	57.6918
160.000	942	-997	1.1634	56.3172
162.000	1002	-1059	1.2366	55.1538
164.000	1031	-1089	1.2720	53.9172
166.000	1059	-1117	1.3056	52.6452
168.000	1055	-1113	1.3008	51.3396
170.000	1024	-1079	1.2618	50.0388
172.000	1046	-1102	1.2888	48.7770

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

| PREVIOUS |

| CURRENT |

1

27747B

08/21/97 08:13

129

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR.DEV	
174.000	1025	-1077	1.2612	47.4882
176.000	949	-1001	1.1700	46.2270
178.000	879	-934	1.0878	45.0570
180.000	798	-851	0.9894	43.9692
182.000	792	-850	0.9852	42.9798
184.000	740	-797	0.9222	41.9946
186.000	675	-727	0.8412	41.0724
188.000	603	-658	0.7566	40.2312
190.000	642	-699	0.8046	39.4746
192.000	738	-786	0.9144	38.6700
194.000	847	-902	1.0494	37.7556
196.000	884	-938	1.0932	36.7062
198.000	943	-999	1.1652	35.6130
200.000	991	-1047	1.2228	34.4478
202.000	1050	-1099	1.2894	33.2250
204.000	890	-947	1.1022	31.9356
206.000	706	-758	0.8784	30.8334
208.000	629	-683	0.7872	29.9550
210.000	721	-776	0.8982	29.1678
212.000	794	-851	0.9870	28.2696
214.000	828	-885	1.0278	27.2826
216.000	871	-929	1.0800	26.2548
218.000	1021	-1077	1.2588	25.1748
220.000	1165	-1220	1.4310	23.9160
222.000	1074	-1127	1.3206	22.4850
224.000	957	-1010	1.1802	21.1644
226.000	866	-922	1.0728	19.9842
228.000	690	-747	0.8622	18.9114
230.000	603	-658	0.7566	18.0492
232.000	629	-688	0.7902	17.2926
234.000	569	-625	0.7164	16.5024
236.000	541	-602	0.6858	15.7860
238.000	571	-631	0.7212	15.1002
240.000	616	-679	0.7770	14.3790
242.000	578	-630	0.7248	13.6020
244.000	679	-734	0.8478	12.8772
246.000	839	-894	1.0398	12.0294
248.000	1061	-1113	1.3044	10.9896
250.000	1325	-1375	1.6200	9.6852
252.000	1589	-1650	1.9434	8.0652
254.000	1650	-1708	2.0148	6.1218
256.000	1684	-1738	2.0532	4.1070
258.000	1682	-1741	2.0538	2.0538

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

1

SENSOR #

27747B

DATE

08/21/97 08:13

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
2.000	303	-383	0.4116	-70.3470
4.000	318	-414	0.4392	-70.7586
6.000	325	-404	0.4374	-71.1978
8.000	237	-317	0.3324	-71.6352
10.000	206	-290	0.2976	-71.9676
12.000	154	-244	0.2388	-72.2652
14.000	134	-216	0.2100	-72.5040
16.000	32	-119	0.0906	-72.7140
18.000	90	-177	0.1602	-72.8046
20.000	136	-215	0.2106	-72.9648
22.000	38	-127	0.0990	-73.1754
24.000	9	-99	0.0648	-73.2744
26.000	-1	-91	0.0540	-73.3392
28.000	-32	-55	0.0138	-73.3932
30.000	-71	-6	-0.0390	-73.4070
32.000	-282	189	-0.2826	-73.3680
34.000	-361	273	-0.3804	-73.0854
36.000	-436	349	-0.4710	-72.7050
38.000	-500	412	-0.5472	-72.2340
40.000	-538	455	-0.5958	-71.6868
42.000	-583	490	-0.6438	-71.0910
44.000	-578	486	-0.6384	-70.4472
46.000	-601	506	-0.6642	-69.8088
48.000	-600	513	-0.6678	-69.1446
50.000	-536	451	-0.5922	-68.4768
52.000	-517	430	-0.5682	-67.8846
54.000	-459	366	-0.4950	-67.3164
56.000	-408	317	-0.4350	-66.8214
58.000	-343	259	-0.3612	-66.3864
60.000	-285	195	-0.2880	-66.0252
62.000	-247	158	-0.2430	-65.7372
64.000	-200	108	-0.1848	-65.4942
66.000	-186	91	-0.1662	-65.3094
68.000	-167	74	-0.1446	-65.1432
70.000	-153	63	-0.1296	-64.9986
72.000	-263	167	-0.2580	-64.8690
74.000	-277	189	-0.2796	-64.6110
76.000	-324	234	-0.3348	-64.3314
78.000	-374	284	-0.3948	-63.9966
80.000	-398	314	-0.4272	-63.6018
82.000	-459	368	-0.4962	-63.1746
84.000	-467	377	-0.5064	-62.6784
86.000	-491	401	-0.5352	-62.1720

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

1

27747B

08/21/97 08:13

129

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
88.000	-491	401	-0.5352	-61.6368
90.000	-477	392	-0.5214	-61.1016
92.000	-563	470	-0.6198	-60.5802
94.000	-511	425	-0.5616	-59.9604
96.000	-453	367	-0.4920	-59.3988
98.000	-390	302	-0.4152	-58.9068
100.000	-327	243	-0.3420	-58.4916
102.000	-362	274	-0.3816	-58.1496
104.000	-308	218	-0.3156	-57.7680
106.000	-270	179	-0.2694	-57.4524
108.000	-251	159	-0.2460	-57.1830
110.000	-222	141	-0.2178	-56.9370
112.000	-311	219	-0.3180	-56.7192
114.000	-331	239	-0.3420	-56.4012
116.000	-360	270	-0.3780	-56.0592
118.000	-398	307	-0.4230	-55.6812
120.000	-420	337	-0.4542	-55.2582
122.000	-480	391	-0.5226	-54.8040
124.000	-515	427	-0.5652	-54.2814
126.000	-551	460	-0.6066	-53.7162
128.000	-584	493	-0.6462	-53.1096
130.000	-625	543	-0.7008	-52.4634
132.000	-774	682	-0.8736	-51.7626
134.000	-839	750	-0.9534	-50.8890
136.000	-893	806	-1.0194	-49.9356
138.000	-922	835	-1.0542	-48.9162
140.000	-900	811	-1.0266	-47.8620
142.000	-887	811	-1.0188	-46.8354
144.000	-779	703	-0.8892	-45.8166
146.000	-654	583	-0.7422	-44.9274
148.000	-516	465	-0.5886	-44.1852
150.000	-407	329	-0.4416	-43.5966
152.000	-462	361	-0.4938	-43.1550
154.000	-442	346	-0.4728	-42.6612
156.000	-419	333	-0.4512	-42.1884
158.000	-473	387	-0.5160	-41.7372
160.000	-503	432	-0.5610	-41.2212
162.000	-653	558	-0.7266	-40.6602
164.000	-641	547	-0.7128	-39.9336
166.000	-603	506	-0.6654	-39.2208
168.000	-531	438	-0.5814	-38.5554
170.000	-515	427	-0.5652	-37.9740
172.000	-553	462	-0.6090	-37.4088

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

1

SENSOR #

27747B

DATE

08/21/97 08:13

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
174.000	-583	496	-0.6474	-36.7998
176.000	-639	547	-0.7116	-36.1524
178.000	-670	577	-0.7482	-35.4408
180.000	-703	629	-0.7992	-34.6926
182.000	-835	731	-0.9396	-33.8934
184.000	-826	734	-0.9360	-32.9538
186.000	-780	697	-0.8862	-32.0178
188.000	-681	593	-0.7644	-31.1316
190.000	-646	557	-0.7218	-30.3672
192.000	-620	520	-0.6840	-29.6454
194.000	-617	527	-0.6864	-28.9614
196.000	-622	535	-0.6942	-28.2750
198.000	-731	636	-0.8202	-27.5808
200.000	-884	803	-1.0122	-26.7606
202.000	-978	898	-1.1256	-25.7484
204.000	-839	749	-0.9528	-24.6228
206.000	-568	475	-0.6258	-23.6700
208.000	-474	391	-0.5190	-23.0442
210.000	-594	505	-0.6594	-22.5252
212.000	-641	541	-0.7092	-21.8658
214.000	-658	566	-0.7344	-21.1566
216.000	-766	669	-0.8610	-20.4222
218.000	-718	635	-0.8118	-19.5612
220.000	-615	530	-0.6870	-18.7494
222.000	-597	497	-0.6564	-18.0624
224.000	-587	497	-0.6504	-17.4060
226.000	-610	515	-0.6750	-16.7556
228.000	-615	519	-0.6804	-16.0806
230.000	-649	563	-0.7272	-15.4002
232.000	-721	613	-0.8004	-14.6730
234.000	-713	621	-0.8004	-13.8726
236.000	-740	653	-0.8358	-13.0722
238.000	-850	757	-0.9642	-12.2364
240.000	-934	838	-1.0632	-11.2722
242.000	-905	806	-1.0266	-10.2090
244.000	-879	789	-1.0008	-9.1824
246.000	-882	795	-1.0062	-8.1816
248.000	-874	786	-0.9960	-7.1754
250.000	-889	813	-1.0212	-6.1794
252.000	-1041	931	-1.1832	-5.1582
254.000	-1091	997	-1.2528	-3.9750
256.000	-1151	1070	-1.3326	-2.7222
258.000	-1203	1113	-1.3896	-1.3896

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 09:10

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
2.000	337	-403	0.4440	125.0256
4.000	341	-395	0.4416	124.5816
6.000	172	-226	0.2388	124.1400
8.000	-133	74	-0.1242	123.9012
10.000	-139	83	-0.1332	124.0254
12.000	11	-68	0.0474	124.1586
14.000	71	-128	0.1194	124.1112
16.000	70	-127	0.1182	123.9918
18.000	50	-109	0.0954	123.8736
20.000	9	-67	0.0456	123.7782
22.000	-31	-27	-0.0024	123.7326
24.000	-49	-9	-0.0240	123.7350
26.000	-65	7	-0.0432	123.7590
28.000	-58	-1	-0.0342	123.8022
30.000	-67	9	-0.0456	123.8364
32.000	19	-77	0.0576	123.8820
34.000	45	-103	0.0888	123.8244
36.000	105	-161	0.1596	123.7356
38.000	159	-215	0.2244	123.5760
40.000	203	-262	0.2790	123.3516
42.000	327	-387	0.4284	123.0726
44.000	389	-449	0.5028	122.6442
46.000	436	-495	0.5586	122.1414
48.000	471	-529	0.6000	121.5828
50.000	513	-566	0.6474	120.9828
52.000	573	-630	0.7218	120.3354
54.000	623	-680	0.7818	119.6136
56.000	668	-726	0.8364	118.8318
58.000	683	-742	0.8550	117.9954
60.000	707	-763	0.8820	117.1404
62.000	780	-838	0.9708	116.2584
64.000	777	-835	0.9672	115.2876
66.000	746	-803	0.9294	114.3204
68.000	701	-760	0.8766	113.3910
70.000	649	-706	0.8130	112.5144
72.000	623	-681	0.7824	111.7014
74.000	589	-646	0.7410	110.9190
76.000	552	-610	0.6972	110.1780
78.000	538	-595	0.6798	109.4808
80.000	501	-557	0.6348	108.8010
82.000	534	-593	0.6762	108.1662
84.000	533	-591	0.6744	107.4900
86.000	549	-607	0.6936	106.8156

A

MEAN STD. DEV.
-58.6 2.8

B

MEAN STD. DEV.
-90.5 6.9

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

[PREVIOUS] [CURRENT]

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 09:10

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
88.000	576	-633	0.7254	106.1220
90.000	597	-653	0.7500	105.3966
92.000	754	-816	0.9420	104.6466
94.000	821	-881	1.0212	103.7046
96.000	853	-910	1.0578	102.6834
98.000	886	-944	1.0980	101.6256
100.000	938	-992	1.1580	100.5276
102.000	1137	-1193	1.3980	99.3696
104.000	1209	-1267	1.4856	97.9716
106.000	1263	-1321	1.5504	96.4860
108.000	1309	-1367	1.6056	94.9356
110.000	1345	-1402	1.6482	93.3300
112.000	1470	-1529	1.7994	91.6818
114.000	1454	-1512	1.7796	89.8824
116.000	1405	-1462	1.7202	88.1028
118.000	1311	-1371	1.6092	86.3826
120.000	1179	-1239	1.4508	84.7734
122.000	1101	-1158	1.3554	83.3226
124.000	997	-1057	1.2324	81.9672
126.000	908	-965	1.1238	80.7348
128.000	835	-893	1.0368	79.6110
130.000	788	-844	0.9792	78.5742
132.000	832	-890	1.0332	77.5950
134.000	866	-923	1.0734	76.5618
136.000	926	-980	1.1436	75.4884
138.000	1015	-1074	1.2534	74.3448
140.000	1126	-1181	1.3842	73.0914
142.000	1225	-1278	1.5018	71.7072
144.000	1337	-1391	1.6368	70.2054
146.000	1471	-1526	1.7982	68.5686
148.000	1574	-1630	1.9224	66.7704
150.000	1591	-1647	1.9428	64.8480
152.000	1537	-1596	1.8798	62.9052
154.000	1407	-1466	1.7238	61.0254
156.000	1302	-1362	1.5984	59.3016
158.000	1115	-1176	1.3746	57.7032
160.000	939	-998	1.1622	56.3286
162.000	1001	-1060	1.2366	55.1664
164.000	1032	-1090	1.2732	53.9298
166.000	1057	-1119	1.3056	52.6566
168.000	1053	-1115	1.3008	51.3510
170.000	1021	-1081	1.2612	50.0502
172.000	1043	-1102	1.2870	48.7890

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 09:10

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
174.000	1022	-1081	1.2618	47.5020
176.000	947	-1005	1.1712	46.2402
178.000	878	-937	1.0890	45.0690
180.000	795	-855	0.9900	43.9800
182.000	790	-853	0.9858	42.9900
184.000	739	-799	0.9228	42.0042
186.000	673	-731	0.8424	41.0814
188.000	603	-659	0.7572	40.2390
190.000	640	-704	0.8064	39.4818
192.000	737	-791	0.9168	38.6754
194.000	842	-903	1.0470	37.7586
196.000	882	-941	1.0938	36.7116
198.000	941	-1001	1.1652	35.6178
200.000	990	-1050	1.2240	34.4526
202.000	1049	-1101	1.2900	33.2286
204.000	887	-950	1.1022	31.9386
206.000	706	-764	0.8820	30.8364
208.000	625	-685	0.7860	29.9544
210.000	720	-777	0.8982	29.1684
212.000	794	-853	0.9882	28.2702
214.000	827	-887	1.0284	27.2820
216.000	870	-931	1.0806	26.2536
218.000	1022	-1077	1.2594	25.1730
220.000	1161	-1222	1.4298	23.9136
222.000	1071	-1131	1.3212	22.4838
224.000	955	-1013	1.1808	21.1626
226.000	864	-927	1.0746	19.9818
228.000	689	-749	0.8628	18.9072
230.000	601	-660	0.7566	18.0444
232.000	628	-691	0.7914	17.2878
234.000	566	-627	0.7158	16.4964
236.000	539	-604	0.6858	15.7806
238.000	568	-633	0.7206	15.0948
240.000	616	-682	0.7788	14.3742
242.000	577	-633	0.7260	13.5954
244.000	674	-735	0.8454	12.8694
246.000	834	-895	1.0374	12.0240
248.000	1054	-1114	1.3008	10.9866
250.000	1320	-1381	1.6206	9.6858
252.000	1584	-1652	1.9416	8.0652
254.000	1653	-1710	2.0178	6.1236
256.000	1677	-1741	2.0508	4.1058
258.000	1680	-1745	2.0550	2.0550

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 09:10

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
2.000	297	-393	0.4140	-70.3752
4.000	321	-415	0.4416	-70.7892
6.000	317	-405	0.4332	-71.2308
8.000	237	-327	0.3384	-71.6640
10.000	205	-294	0.2994	-72.0024
12.000	151	-244	0.2370	-72.3018
14.000	132	-220	0.2112	-72.5388
16.000	33	-121	0.0924	-72.7500
18.000	87	-174	0.1566	-72.8424
20.000	135	-217	0.2112	-72.9990
22.000	37	-129	0.0996	-73.2102
24.000	7	-103	0.0660	-73.3098
26.000	-2	-91	0.0534	-73.3758
28.000	-30	-59	0.0174	-73.4292
30.000	-70	-4	-0.0396	-73.4466
32.000	-281	180	-0.2766	-73.4070
34.000	-361	267	-0.3768	-73.1304
36.000	-437	343	-0.4680	-72.7536
38.000	-501	407	-0.5448	-72.2856
40.000	-538	454	-0.5952	-71.7408
42.000	-580	491	-0.6426	-71.1456
44.000	-577	482	-0.6354	-70.5030
46.000	-605	510	-0.6690	-69.8676
48.000	-602	511	-0.6678	-69.1986
50.000	-538	450	-0.5928	-68.5308
52.000	-517	433	-0.5700	-67.9380
54.000	-458	367	-0.4950	-67.3680
56.000	-410	319	-0.4374	-66.8730
58.000	-347	257	-0.3624	-66.4356
60.000	-287	195	-0.2892	-66.0732
62.000	-249	158	-0.2442	-65.7840
64.000	-200	108	-0.1848	-65.5398
66.000	-183	93	-0.1656	-65.3550
68.000	-169	79	-0.1488	-65.1894
70.000	-155	76	-0.1386	-65.0406
72.000	-261	163	-0.2544	-64.9020
74.000	-278	185	-0.2778	-64.6476
76.000	-325	233	-0.3348	-64.3698
78.000	-374	284	-0.3948	-64.0350
80.000	-397	316	-0.4278	-63.6402
82.000	-460	368	-0.4968	-63.2124
84.000	-469	376	-0.5070	-62.7156
86.000	-493	401	-0.5364	-62.2086

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 09:10

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR.DEV	
88.000	-491	401	-0.5352	-61.6722
90.000	-477	395	-0.5232	-61.1370
92.000	-570	473	-0.6258	-60.6138
94.000	-517	420	-0.5622	-59.9880
96.000	-456	367	-0.4938	-59.4258
98.000	-391	301	-0.4152	-58.9320
100.000	-327	242	-0.3414	-58.5168
102.000	-363	275	-0.3828	-58.1754
104.000	-309	217	-0.3156	-57.7926
106.000	-273	180	-0.2718	-57.4770
108.000	-253	159	-0.2472	-57.2052
110.000	-224	139	-0.2178	-56.9580
112.000	-312	216	-0.3168	-56.7402
114.000	-331	239	-0.3420	-56.4234
116.000	-360	271	-0.3786	-56.0814
118.000	-402	309	-0.4266	-55.7028
120.000	-422	335	-0.4542	-55.2762
122.000	-482	390	-0.5232	-54.8220
124.000	-517	425	-0.5652	-54.2988
126.000	-551	460	-0.6066	-53.7336
128.000	-583	493	-0.6456	-53.1270
130.000	-624	546	-0.7020	-52.4814
132.000	-777	675	-0.8712	-51.7794
134.000	-841	746	-0.9522	-50.9082
136.000	-897	804	-1.0206	-49.9560
138.000	-922	830	-1.0512	-48.9354
140.000	-899	812	-1.0266	-47.8842
142.000	-888	813	-1.0206	-46.8576
144.000	-779	705	-0.8904	-45.8370
146.000	-658	585	-0.7458	-44.9466
148.000	-516	444	-0.5760	-44.2008
150.000	-407	327	-0.4404	-43.6248
152.000	-463	362	-0.4950	-43.1844
154.000	-442	349	-0.4746	-42.6894
156.000	-422	332	-0.4524	-42.2148
158.000	-476	385	-0.5166	-41.7624
160.000	-505	429	-0.5604	-41.2458
162.000	-653	555	-0.7248	-40.6854
164.000	-635	549	-0.7104	-39.9606
166.000	-603	509	-0.6672	-39.2502
168.000	-534	443	-0.5862	-38.5830
170.000	-518	426	-0.5664	-37.9968
172.000	-554	459	-0.6078	-37.4304

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 09:10

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR.DEV	
174.000	-586	491	-0.6462	-36.8226
176.000	-640	548	-0.7128	-36.1764
178.000	-670	577	-0.7482	-35.4636
180.000	-704	627	-0.7986	-34.7154
182.000	-840	727	-0.9402	-33.9168
184.000	-826	733	-0.9354	-32.9766
186.000	-778	697	-0.8850	-32.0412
188.000	-682	595	-0.7662	-31.1562
190.000	-654	558	-0.7272	-30.3900
192.000	-621	522	-0.6858	-29.6628
194.000	-621	527	-0.6888	-28.9770
196.000	-626	535	-0.6966	-28.2882
198.000	-731	638	-0.8214	-27.5916
200.000	-885	802	-1.0122	-26.7702
202.000	-979	899	-1.1268	-25.7580
204.000	-838	749	-0.9522	-24.6312
206.000	-570	480	-0.6300	-23.6790
208.000	-476	388	-0.5184	-23.0490
210.000	-594	502	-0.6576	-22.5306
212.000	-638	542	-0.7080	-21.8730
214.000	-654	565	-0.7314	-21.1650
216.000	-765	668	-0.8598	-20.4336
218.000	-716	637	-0.8118	-19.5738
220.000	-623	533	-0.6936	-18.7620
222.000	-594	498	-0.6552	-18.0684
224.000	-588	497	-0.6510	-17.4132
226.000	-610	516	-0.6756	-16.7622
228.000	-615	518	-0.6798	-16.0866
230.000	-651	562	-0.7278	-15.4068
232.000	-722	614	-0.8016	-14.6790
234.000	-716	622	-0.8028	-13.8774
236.000	-741	652	-0.8358	-13.0746
238.000	-846	757	-0.9618	-12.2388
240.000	-935	839	-1.0644	-11.2770
242.000	-906	807	-1.0278	-10.2126
244.000	-882	789	-1.0026	-9.1848
246.000	-885	793	-1.0068	-8.1822
248.000	-875	785	-0.9960	-7.1754
250.000	-888	813	-1.0206	-6.1794
252.000	-1046	931	-1.1862	-5.1588
254.000	-1079	995	-1.2444	-3.9726
256.000	-1162	1067	-1.3374	-2.7282
258.000	-1207	1111	-1.3908	-1.3908

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 09:59

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV.	
2.000	342	-400	0.4452	125.0628
4.000	335	-394	0.4374	124.6176
6.000	163	-219	0.2292	124.1802
8.000	-135	78	-0.1278	123.9510
10.000	-140	82	-0.1332	124.0788
12.000	11	-67	0.0468	124.2120
14.000	70	-127	0.1182	124.1652
16.000	69	-127	0.1176	124.0470
18.000	49	-109	0.0948	123.9294
20.000	8	-66	0.0444	123.8346
22.000	-33	-26	-0.0042	123.7902
24.000	-50	-9	-0.0246	123.7944
26.000	-65	8	-0.0438	123.8190
28.000	-57	-1	-0.0336	123.8628
30.000	-67	8	-0.0450	123.8964
32.000	21	-80	0.0606	123.9414
34.000	45	-103	0.0888	123.8808
36.000	105	-163	0.1608	123.7920
38.000	159	-218	0.2262	123.6312
40.000	204	-262	0.2796	123.4050
42.000	332	-391	0.4338	123.1254
44.000	390	-451	0.5046	122.6916
46.000	437	-503	0.5640	122.1870
48.000	470	-529	0.5994	121.6230
50.000	514	-568	0.6492	121.0236
52.000	575	-633	0.7248	120.3744
54.000	625	-682	0.7842	119.6496
56.000	670	-726	0.8376	118.8654
58.000	684	-742	0.8556	118.0278
60.000	706	-763	0.8814	117.1722
62.000	781	-839	0.9720	116.2908
64.000	775	-835	0.9660	115.3188
66.000	743	-802	0.9270	114.3528
68.000	702	-759	0.8766	113.4258
70.000	647	-706	0.8118	112.5492
72.000	622	-681	0.7818	111.7374
74.000	588	-647	0.7410	110.9556
76.000	551	-610	0.6966	110.2146
78.000	537	-596	0.6798	109.5180
80.000	501	-558	0.6354	108.8382
82.000	534	-593	0.6762	108.2028
84.000	533	-591	0.6744	107.5266
86.000	549	-608	0.6942	106.8522

AMEAN STD. DEV.
-59.6 2.6BMEAN STD. DEV.
-88.9 6.3

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 09:59

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
88.000	576	-635	0.7266	106.1580
90.000	598	-655	0.7518	105.4314
92.000	758	-818	0.9456	104.6796
94.000	824	-881	1.0230	103.7340
96.000	854	-911	1.0590	102.7110
98.000	886	-945	1.0986	101.6520
100.000	937	-995	1.1592	100.5534
102.000	1139	-1198	1.4022	99.3942
104.000	1209	-1269	1.4868	97.9920
106.000	1263	-1321	1.5504	96.5052
108.000	1309	-1369	1.6068	94.9548
110.000	1345	-1404	1.6494	93.3480
112.000	1469	-1530	1.7994	91.6986
114.000	1454	-1513	1.7802	89.8992
116.000	1402	-1462	1.7184	88.1190
118.000	1310	-1371	1.6086	86.4006
120.000	1177	-1236	1.4478	84.7920
122.000	1098	-1157	1.3530	83.3442
124.000	995	-1054	1.2294	81.9912
126.000	907	-966	1.1238	80.7618
128.000	834	-893	1.0362	79.6380
130.000	787	-845	0.9792	78.6018
132.000	832	-894	1.0356	77.6226
134.000	866	-925	1.0746	76.5870
136.000	925	-983	1.1448	75.5124
138.000	1019	-1078	1.2582	74.3676
140.000	1127	-1185	1.3872	73.1094
142.000	1225	-1280	1.5030	71.7222
144.000	1338	-1395	1.6398	70.2192
146.000	1471	-1529	1.8000	68.5794
148.000	1573	-1631	1.9224	66.7794
150.000	1590	-1651	1.9446	64.8570
152.000	1536	-1593	1.8774	62.9124
154.000	1406	-1465	1.7226	61.0350
156.000	1301	-1359	1.5960	59.3124
158.000	1116	-1174	1.3740	57.7164
160.000	939	-1001	1.1640	56.3424
162.000	1001	-1061	1.2372	55.1784
164.000	1031	-1091	1.2732	53.9412
166.000	1057	-1121	1.3068	52.6680
168.000	1053	-1115	1.3008	51.3612
170.000	1021	-1080	1.2606	50.0604
172.000	1043	-1103	1.2876	48.7998

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 09:59

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
174.000	1021	-1080	1.2606	47.5122
176.000	945	-1003	1.1688	46.2516
178.000	878	-938	1.0896	45.0828
180.000	795	-854	0.9894	43.9932
182.000	789	-853	0.9852	43.0038
184.000	738	-798	0.9216	42.0186
186.000	673	-730	0.8418	41.0970
188.000	602	-661	0.7578	40.2552
190.000	640	-702	0.8052	39.4974
192.000	739	-794	0.9198	38.6922
194.000	845	-905	1.0500	37.7724
196.000	881	-942	1.0938	36.7224
198.000	942	-1002	1.1664	35.6286
200.000	991	-1050	1.2246	34.4622
202.000	1048	-1101	1.2894	33.2376
204.000	888	-950	1.1028	31.9482
206.000	701	-761	0.8772	30.8454
208.000	625	-688	0.7878	29.9682
210.000	716	-778	0.8964	29.1804
212.000	793	-855	0.9888	28.2840
214.000	827	-889	1.0296	27.2952
216.000	870	-934	1.0824	26.2656
218.000	1017	-1079	1.2576	25.1832
220.000	1161	-1223	1.4304	23.9256
222.000	1069	-1130	1.3194	22.4952
224.000	953	-1013	1.1796	21.1758
226.000	864	-925	1.0734	19.9962
228.000	689	-748	0.8622	18.9228
230.000	601	-659	0.7560	18.0606
232.000	628	-693	0.7926	17.3046
234.000	565	-627	0.7152	16.5120
236.000	538	-605	0.6858	15.7968
238.000	568	-634	0.7212	15.1110
240.000	617	-682	0.7794	14.3898
242.000	575	-634	0.7254	13.6104
244.000	678	-739	0.8502	12.8850
246.000	837	-898	1.0410	12.0348
248.000	1056	-1122	1.3068	10.9938
250.000	1323	-1380	1.6218	9.6870
252.000	1585	-1654	1.9434	8.0652
254.000	1650	-1712	2.0172	6.1218
256.000	1678	-1743	2.0526	4.1046
258.000	1677	-1743	2.0520	2.0520

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 09:59

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR.DEV	
2.000	309	-399	0.4248	-70.3122
4.000	327	-414	0.4446	-70.7370
6.000	317	-406	0.4338	-71.1816
8.000	237	-321	0.3348	-71.6154
10.000	207	-290	0.2982	-71.9502
12.000	155	-240	0.2370	-72.2484
14.000	131	-217	0.2088	-72.4854
16.000	31	-121	0.0912	-72.6942
18.000	94	-180	0.1644	-72.7854
20.000	136	-215	0.2106	-72.9498
22.000	34	-126	0.0960	-73.1604
24.000	9	-96	0.0630	-73.2564
26.000	-1	-86	0.0510	-73.3194
28.000	-31	-54	0.0138	-73.3704
30.000	-71	-7	-0.0384	-73.3842
32.000	-283	187	-0.2820	-73.3458
34.000	-362	273	-0.3810	-73.0638
36.000	-437	351	-0.4728	-72.6828
38.000	-499	413	-0.5472	-72.2100
40.000	-537	454	-0.5946	-71.6628
42.000	-577	489	-0.6396	-71.0682
44.000	-578	486	-0.6384	-70.4286
46.000	-603	511	-0.6684	-69.7902
48.000	-601	514	-0.6690	-69.1218
50.000	-537	450	-0.5922	-68.4528
52.000	-511	430	-0.5646	-67.8606
54.000	-454	365	-0.4914	-67.2960
56.000	-403	318	-0.4326	-66.8046
58.000	-341	256	-0.3582	-66.3720
60.000	-283	195	-0.2868	-66.0138
62.000	-238	158	-0.2376	-65.7270
64.000	-196	106	-0.1812	-65.4894
66.000	-183	90	-0.1638	-65.3082
68.000	-165	76	-0.1446	-65.1444
70.000	-154	74	-0.1368	-64.9998
72.000	-257	169	-0.2556	-64.8630
74.000	-277	186	-0.2778	-64.6074
76.000	-323	231	-0.3324	-64.3296
78.000	-373	282	-0.3930	-63.9972
80.000	-402	313	-0.4290	-63.6042
82.000	-458	371	-0.4974	-63.1752
84.000	-467	377	-0.5064	-62.6778
86.000	-491	401	-0.5352	-62.1714

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9602

site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

3

27747B

08/21/97 09:59

129

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
88.000	-490	398	-0.5328	-61.6362
90.000	-475	390	-0.5190	-61.1034
92.000	-561	470	-0.6186	-60.5844
94.000	-512	425	-0.5622	-59.9658
96.000	-451	368	-0.4914	-59.4036
98.000	-390	300	-0.4140	-58.9122
100.000	-326	249	-0.3450	-58.4982
102.000	-362	272	-0.3804	-58.1532
104.000	-308	216	-0.3144	-57.7728
106.000	-271	181	-0.2712	-57.4584
108.000	-251	160	-0.2466	-57.1872
110.000	-222	141	-0.2178	-56.9406
112.000	-309	214	-0.3138	-56.7228
114.000	-328	237	-0.3390	-56.4090
116.000	-361	271	-0.3792	-56.0700
118.000	-401	309	-0.4260	-55.6908
120.000	-423	335	-0.4548	-55.2648
122.000	-483	390	-0.5238	-54.8100
124.000	-515	424	-0.5634	-54.2862
126.000	-548	458	-0.6036	-53.7228
128.000	-582	492	-0.6444	-53.1192
130.000	-626	543	-0.7014	-52.4748
132.000	-777	683	-0.8760	-51.7734
134.000	-841	748	-0.9534	-50.8974
136.000	-894	803	-1.0182	-49.9440
138.000	-919	829	-1.0488	-48.9258
140.000	-898	811	-1.0254	-47.8770
142.000	-889	813	-1.0212	-46.8516
144.000	-779	705	-0.8904	-45.8304
146.000	-657	579	-0.7416	-44.9400
148.000	-515	441	-0.5736	-44.1984
150.000	-402	325	-0.4362	-43.6248
152.000	-459	361	-0.4920	-43.1886
154.000	-441	349	-0.4740	-42.6966
156.000	-425	333	-0.4548	-42.2226
158.000	-478	389	-0.5202	-41.7678
160.000	-506	429	-0.5610	-41.2476
162.000	-654	555	-0.7254	-40.6866
164.000	-640	547	-0.7122	-39.9612
166.000	-602	509	-0.6666	-39.2490
168.000	-534	439	-0.5838	-38.5824
170.000	-520	428	-0.5688	-37.9986
172.000	-554	458	-0.6072	-37.4298

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997
 SITE: BMTDAM HOLE NUMBER IC9602
 site description Sta. 6+00, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 09:59

READINGS PER DIRECTION

129

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR.DEV	
174.000	-583	493	-0.6456	-36.8226
176.000	-638	547	-0.7110	-36.1770
178.000	-668	578	-0.7476	-35.4660
180.000	-705	628	-0.7998	-34.7184
182.000	-841	729	-0.9420	-33.9186
184.000	-825	731	-0.9336	-32.9766
186.000	-775	693	-0.8808	-32.0430
188.000	-679	590	-0.7614	-31.1622
190.000	-652	560	-0.7272	-30.4008
192.000	-618	520	-0.6828	-29.6736
194.000	-619	526	-0.6870	-28.9908
196.000	-625	534	-0.6954	-28.3038
198.000	-727	634	-0.8166	-27.6084
200.000	-879	801	-1.0080	-26.7918
202.000	-977	898	-1.1250	-25.7838
204.000	-835	752	-0.9522	-24.6588
206.000	-566	477	-0.6258	-23.7066
208.000	-478	393	-0.5226	-23.0808
210.000	-594	502	-0.6576	-22.5582
212.000	-637	541	-0.7068	-21.9006
214.000	-655	572	-0.7362	-21.1938
216.000	-763	673	-0.8616	-20.4576
218.000	-719	639	-0.8148	-19.5960
220.000	-621	530	-0.6906	-18.7812
222.000	-594	495	-0.6534	-18.0906
224.000	-589	499	-0.6528	-17.4372
226.000	-608	514	-0.6732	-16.7844
228.000	-613	522	-0.6810	-16.1112
230.000	-650	565	-0.7290	-15.4302
232.000	-722	615	-0.8022	-14.7012
234.000	-717	619	-0.8016	-13.8990
236.000	-741	653	-0.8364	-13.0974
238.000	-849	759	-0.9648	-12.2610
240.000	-934	841	-1.0650	-11.2962
242.000	-908	810	-1.0308	-10.2312
244.000	-883	789	-1.0032	-9.2004
246.000	-886	793	-1.0074	-8.1972
248.000	-877	786	-0.9978	-7.1898
250.000	-889	814	-1.0218	-6.1920
252.000	-1043	936	-1.1874	-5.1702
254.000	-1089	997	-1.2516	-3.9828
256.000	-1161	1069	-1.3380	-2.7312
258.000	-1208	1114	-1.3932	-1.3932

END OF RECORDS

INCLINOMETER IC-96-3

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 20, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

1

SENSOR #

27747B

DATE

08/20/97 18:11

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
2.000	-562	501	-0.6378	-26.6550
4.000	-545	488	-0.6198	-26.0172
6.000	-525	466	-0.5946	-25.3974
8.000	-445	386	-0.4986	-24.8028
10.000	-443	386	-0.4974	-24.3042
12.000	-371	315	-0.4116	-23.8068
14.000	-560	501	-0.6366	-23.3952
16.000	-577	520	-0.6582	-22.7586
18.000	-515	49	-0.5844	-22.1004
20.000	-392	336	-0.4368	-21.5160
22.000	-318	262	-0.3480	-21.0792
24.000	-227	170	-0.2382	-20.7312
26.000	-127	72	-0.1194	-20.4930
28.000	-87	34	-0.0726	-20.3736
30.000	-82	26	-0.0648	-20.3010
32.000	-82	26	-0.0648	-20.2362
34.000	-67	10	-0.0462	-20.1714
36.000	-27	-29	0.0012	-20.1252
38.000	-9	-49	0.0240	-20.1264
40.000	-11	-46	0.0210	-20.1504
42.000	15	-71	0.0516	-20.1714
44.000	10	-66	0.0456	-20.2230
46.000	-2	-51	0.0294	-20.2686
48.000	-78	26	-0.0624	-20.2980
50.000	-245	191	-0.2616	-20.2356
52.000	-366	310	-0.4056	-19.9740
54.000	-395	338	-0.4398	-19.5684
56.000	-411	354	-0.4590	-19.1286
58.000	-442	387	-0.4974	-18.6696
60.000	-412	356	-0.4608	-18.1722
62.000	-366	310	-0.4056	-17.7114
64.000	-314	257	-0.3426	-17.3058
66.000	-272	215	-0.2922	-16.9632
68.000	-187	129	-0.1896	-16.6710
70.000	-189	131	-0.1920	-16.4814
72.000	-211	156	-0.2202	-16.2894
74.000	-233	178	-0.2466	-16.0692
76.000	-275	223	-0.2988	-15.8226
78.000	-322	266	-0.3528	-15.5238
80.000	-380	325	-0.4230	-15.1710
82.000	-462	409	-0.5226	-14.7480
84.000	-517	463	-0.5880	-14.2254
86.000	-527	476	-0.6018	-13.6374

A

MEAN
-56.3STD. DEV.
2.3

B

MEAN
-109.4STD. DEV.
5.1

SITE: BMTDAM HOLE NUMBER IC9603
site description Sta. 3+50, Offset 75' Downstream

← PREVIOUS →

← CURRENT →

DATA SET #

1

SENSOR #

27747B

DATE

08/20/97 18:11

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
88.000	-536	480	-0.6096	-13.0356
90.000	-549	491	-0.6240	-12.4260
92.000	-542	482	-0.6144	-11.8020
94.000	-518	460	-0.5868	-11.1876
96.000	-476	419	-0.5370	-10.6008
98.000	-418	362	-0.4680	-10.0638
100.000	-427	373	-0.4800	-9.5958
102.000	-450	397	-0.5082	-9.1158
104.000	-493	435	-0.5568	-8.6076
106.000	-532	479	-0.6066	-8.0508
108.000	-554	496	-0.6300	-7.4442
110.000	-611	557	-0.7008	-6.8142
112.000	-654	601	-0.7530	-6.1134
114.000	-688	634	-0.7932	-5.3604
116.000	-688	633	-0.7926	-4.5672
118.000	-589	530	-0.6714	-3.7746
120.000	-515	457	-0.5832	-3.1032
122.000	-469	408	-0.5262	-2.5200
124.000	-409	352	-0.4566	-1.9938
126.000	-350	287	-0.3822	-1.5372
128.000	-331	274	-0.3630	-1.1550
130.000	-273	212	-0.2910	-0.7920
132.000	-235	177	-0.2472	-0.5010
134.000	-240	183	-0.2538	-0.2538

END OF RECORDS

Printed August 20, 1997 Data for Hole IC9603 Data Set 1
 SENSOR: 27747B

PAGE 3

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
2.000	-418	321	-0.4434	-49.9806
4.000	-341	229	-0.3420	-49.5372
6.000	-243	134	-0.2262	-49.1952
8.000	-318	210	-0.3168	-48.9690
10.000	-238	130	-0.2208	-48.6522
12.000	-162	57	-0.1314	-48.4314
14.000	-115	9	-0.0744	-48.3000
16.000	-191	89	-0.1680	-48.2256
18.000	-172	60	-0.1392	-48.0576
20.000	-87	-22	-0.0390	-47.9184
22.000	-1	-108	0.0642	-47.8794
24.000	61	-170	0.1386	-47.9436
26.000	106	-215	0.1926	-48.0822
28.000	114	-226	0.2040	-48.2748
30.000	97	-210	0.1842	-48.4788
32.000	41	-149	0.1140	-48.6630
34.000	-66	-34	-0.0192	-48.7770
36.000	-183	87	-0.1620	-48.7578
38.000	-467	345	-0.4872	-48.5958
40.000	-543	430	-0.5838	-48.1086
42.000	-569	458	-0.6162	-47.5248
44.000	-557	446	-0.6018	-46.9086
46.000	-509	403	-0.5472	-46.3068
48.000	-486	381	-0.5202	-45.7596
50.000	-368	258	-0.3756	-45.2394
52.000	-321	211	-0.3192	-44.8638
54.000	-301	188	-0.2934	-44.5446
56.000	-261	150	-0.2466	-44.2512
58.000	-234	117	-0.2106	-44.0046
60.000	-263	158	-0.2526	-43.7940
62.000	-341	234	-0.3450	-43.5414
64.000	-406	298	-0.4224	-43.1964
66.000	-439	335	-0.4644	-42.7740
68.000	-603	484	-0.6522	-42.3096
70.000	-683	570	-0.7518	-41.6574
72.000	-742	633	-0.8250	-40.9056
74.000	-758	647	-0.8430	-40.0806
76.000	-772	667	-0.8634	-39.2376
78.000	-835	718	-0.9318	-38.3742
80.000	-818	705	-0.9138	-37.4424
82.000	-841	728	-0.9414	-36.5286
84.000	-859	746	-0.9630	-35.5872
86.000	-826	723	-0.9294	-34.6242
88.000	-864	746	-0.9660	-33.6948
90.000	-929	822	-1.0506	-32.7288
92.000	-1009	901	-1.1460	-31.6782
94.000	-1026	913	-1.1634	-30.5322
96.000	-1068	955	-1.2138	-29.3688
98.000	-1127	1014	-1.2846	-28.1550
100.000	-1141	1030	-1.3026	-26.8704
102.000	-1112	1001	-1.2678	-25.5678
104.000	-1057	945	-1.2012	-24.3000

Printed August 20, 1997 Data for Hole IC9603 Data Set 1
SENSOR: 27747B

PAGE 4

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
106.000	-1020	918	-1.1628	-23.0988
108.000	-1123	1010	-1.2798	-21.9360
110.000	-1129	1015	-1.2864	-20.6562
112.000	-1117	1008	-1.2750	-19.3698
114.000	-1071	958	-1.2174	-18.0948
116.000	-1054	951	-1.2030	-16.8774
118.000	-1134	1026	-1.2960	-15.6744
120.000	-1180	1065	-1.3470	-14.3784
122.000	-1246	1136	-1.4292	-13.0314
124.000	-1371	1262	-1.5798	-11.6022
126.000	-1530	1427	-1.7742	-10.0224
128.000	-1642	1534	-1.9056	-8.2482
130.000	-1711	1614	-1.9950	-6.3426
132.000	-1835	1724	-2.1354	-4.3476
134.000	-1902	1785	-2.2122	-2.2122

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

2

27747B

08/21/97 15:01

67

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
2.000	-545	490	-0.6210	-26.5842
4.000	-542	482	-0.6144	-25.9632
6.000	-526	469	-0.5970	-25.3488
8.000	-446	388	-0.5004	-24.7518
10.000	-446	389	-0.5010	-24.2514
12.000	-371	315	-0.4116	-23.7504
14.000	-557	502	-0.6354	-23.3388
16.000	-578	522	-0.6600	-22.7034
18.000	-515	459	-0.5844	-22.0434
20.000	-394	337	-0.4386	-21.4590
22.000	-318	263	-0.3486	-21.0204
24.000	-226	171	-0.2382	-20.6718
26.000	-127	73	-0.1200	-20.4336
28.000	-88	33	-0.0726	-20.3136
30.000	-82	27	-0.0654	-20.2410
32.000	-82	28	-0.0660	-20.1756
34.000	-67	11	-0.0468	-20.1096
36.000	-27	-27	0.0000	-20.0628
38.000	-8	-49	0.0246	-20.0628
40.000	-12	-47	0.0210	-20.0874
42.000	17	-72	0.0534	-20.1084
44.000	11	-66	0.0462	-20.1618
46.000	-2	-51	0.0294	-20.2080
48.000	-79	26	-0.0630	-20.2374
50.000	-246	193	-0.2634	-20.1744
52.000	-365	310	-0.4050	-19.9110
54.000	-394	338	-0.4392	-19.5060
56.000	-411	355	-0.4596	-19.0668
58.000	-442	388	-0.4980	-18.6072
60.000	-412	355	-0.4602	-18.1092
62.000	-365	309	-0.4044	-17.6490
64.000	-311	257	-0.3408	-17.2446
66.000	-271	214	-0.2910	-16.9038
68.000	-185	129	-0.1884	-16.6128
70.000	-187	131	-0.1908	-16.4244
72.000	-211	157	-0.2208	-16.2336
74.000	-232	178	-0.2460	-16.0128
76.000	-275	224	-0.2994	-15.7668
78.000	-321	266	-0.3522	-15.4674
80.000	-380	326	-0.4236	-15.1152
82.000	-462	407	-0.5214	-14.6916
84.000	-517	463	-0.5880	-14.1702
86.000	-527	478	-0.6030	-13.5822

A

B

STD. DEV. MEAN
2.3 -55.1MEAN STD. DEV.
-89.0 5.0

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 15:01

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
88.000	-535	478	-0.6078	-12.9792
90.000	-547	493	-0.6240	-12.3714
92.000	-539	484	-0.6138	-11.7474
94.000	-514	457	-0.5826	-11.1336
96.000	-474	418	-0.5352	-10.5510
98.000	-415	360	-0.4650	-10.0158
100.000	-426	373	-0.4794	-9.5508
102.000	-449	398	-0.5082	-9.0714
104.000	-491	439	-0.5580	-8.5632
106.000	-530	478	-0.6048	-8.0052
108.000	-555	498	-0.6318	-7.4004
110.000	-611	558	-0.7014	-6.7686
112.000	-655	602	-0.7542	-6.0672
114.000	-686	637	-0.7938	-5.3130
116.000	-683	632	-0.7890	-4.5192
118.000	-585	527	-0.6672	-3.7302
120.000	-507	451	-0.5748	-3.0630
122.000	-462	402	-0.5184	-2.4882
124.000	-402	349	-0.4506	-1.9698
126.000	-342	282	-0.3744	-1.5192
128.000	-327	271	-0.3588	-1.1448
130.000	-265	207	-0.2832	-0.7860
132.000	-237	178	-0.2490	-0.5028
134.000	-239	184	-0.2538	-0.2538

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 15:01

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
2.000	-395	305	-0.4200	-49.9884
4.000	-323	237	-0.3360	-49.5684
6.000	-231	142	-0.2238	-49.2324
8.000	-310	222	-0.3192	-49.0086
10.000	-228	137	-0.2190	-48.6894
12.000	-152	64	-0.1296	-48.4704
14.000	-107	16	-0.0738	-48.3408
16.000	-183	101	-0.1704	-48.2670
18.000	-162	72	-0.1404	-48.0966
20.000	-76	-9	-0.0402	-47.9562
22.000	16	-99	0.0690	-47.9160
24.000	74	-164	0.1428	-47.9850
26.000	116	-208	0.1944	-48.1278
28.000	124	-215	0.2034	-48.3222
30.000	106	-196	0.1812	-48.5256
32.000	50	-129	0.1074	-48.7068
34.000	-58	-22	-0.0216	-48.8142
36.000	-167	93	-0.1560	-48.7926
38.000	-455	356	-0.4866	-48.6366
40.000	-531	441	-0.5832	-48.1500
42.000	-559	470	-0.6174	-47.5668
44.000	-549	458	-0.6042	-46.9494
46.000	-497	409	-0.5436	-46.3452
48.000	-475	388	-0.5178	-45.8016
50.000	-357	263	-0.3720	-45.2838
52.000	-310	216	-0.3156	-44.9118
54.000	-291	200	-0.2946	-44.5962
56.000	-250	162	-0.2472	-44.3016
58.000	-221	133	-0.2124	-44.0544
60.000	-255	173	-0.2568	-43.8420
62.000	-330	245	-0.3450	-43.5852
64.000	-397	303	-0.4200	-43.2402
66.000	-430	346	-0.4656	-42.8202
68.000	-591	496	-0.6522	-42.3546
70.000	-673	583	-0.7536	-41.7024
72.000	-732	641	-0.8238	-40.9488
74.000	-747	655	-0.8412	-40.1250
76.000	-762	675	-0.8622	-39.2838
78.000	-825	727	-0.9312	-38.4216
80.000	-809	717	-0.9156	-37.4904
82.000	-833	742	-0.9450	-36.5748
84.000	-849	758	-0.9642	-35.6298
86.000	-816	730	-0.9276	-34.6656

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/21/97 15:01

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
88.000	-854	762	-0.9696	-33.7380
90.000	-923	829	-1.0512	-32.7684
92.000	-1000	906	-1.1436	-31.7172
94.000	-1017	928	-1.1670	-30.5736
96.000	-1058	968	-1.2156	-29.4066
98.000	-1119	1026	-1.2870	-28.1910
100.000	-1131	1038	-1.3014	-26.9040
102.000	-1099	1006	-1.2630	-25.6026
104.000	-1046	950	-1.1976	-24.3396
106.000	-1010	933	-1.1658	-23.1420
108.000	-1113	1019	-1.2792	-21.9762
110.000	-1117	1024	-1.2846	-20.6970
112.000	-1106	1014	-1.2720	-19.4124
114.000	-1059	962	-1.2126	-18.1404
116.000	-1050	969	-1.2114	-16.9278
118.000	-1130	1039	-1.3014	-15.7164
120.000	-1165	1080	-1.3470	-14.4150
122.000	-1240	1153	-1.4358	-13.0680
124.000	-1367	1276	-1.5858	-11.6322
126.000	-1529	1443	-1.7832	-10.0464
128.000	-1635	1545	-1.9080	-8.2632
130.000	-1706	1629	-2.0010	-6.3552
132.000	-1821	1736	-2.1342	-4.3542
134.000	-1895	1805	-2.2200	-2.2200

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 15:30

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
2.000	-551	488	-0.6234	-26.5212
4.000	-552	489	-0.6246	-25.8978
6.000	-531	473	-0.6024	-25.2732
8.000	-447	388	-0.5010	-24.6708
10.000	-447	387	-0.5004	-24.1698
12.000	-372	316	-0.4128	-23.6694
14.000	-558	502	-0.6360	-23.2566
16.000	-580	519	-0.6594	-22.6206
18.000	-515	457	-0.5832	-21.9612
20.000	-392	333	-0.4350	-21.3780
22.000	-319	260	-0.3474	-20.9430
24.000	-225	167	-0.2352	-20.5956
26.000	-127	69	-0.1176	-20.3604
28.000	-89	31	-0.0720	-20.2428
30.000	-83	25	-0.0648	-20.1708
32.000	-83	25	-0.0648	-20.1060
34.000	-67	8	-0.0450	-20.0412
36.000	-29	-30	0.0006	-19.9962
38.000	-9	-51	0.0252	-19.9968
40.000	-11	-47	0.0216	-20.0220
42.000	15	-74	0.0534	-20.0436
44.000	11	-69	0.0480	-20.0970
46.000	-2	-55	0.0318	-20.1450
48.000	-79	24	-0.0618	-20.1768
50.000	-249	191	-0.2640	-20.1150
52.000	-367	308	-0.4050	-19.8510
54.000	-394	336	-0.4380	-19.4460
56.000	-411	353	-0.4584	-19.0080
58.000	-443	385	-0.4968	-18.5496
60.000	-411	353	-0.4584	-18.0528
62.000	-366	305	-0.4026	-17.5944
64.000	-313	255	-0.3408	-17.1918
66.000	-273	213	-0.2916	-16.8510
68.000	-185	126	-0.1866	-16.5594
70.000	-187	128	-0.1890	-16.3728
72.000	-211	154	-0.2190	-16.1838
74.000	-233	176	-0.2454	-15.9648
76.000	-277	221	-0.2988	-15.7194
78.000	-320	263	-0.3498	-15.4206
80.000	-380	324	-0.4224	-15.0708
82.000	-462	406	-0.5208	-14.6484
84.000	-516	459	-0.5850	-14.1276
86.000	-526	474	-0.6000	-13.5426

A

MEAN
-58.3STD. DEV.
2.6

B

MEAN
-87.0STD. DEV.
5.1

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 15:30

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV.
	A0	A180	INCR. DEV	
88.000	-536	475	-0.6066	-12.9426
90.000	-547	489	-0.6216	-12.3360
92.000	-539	479	-0.6108	-11.7144
94.000	-514	456	-0.5820	-11.1036
96.000	-473	414	-0.5322	-10.5216
98.000	-417	356	-0.4638	-9.9894
100.000	-427	369	-0.4776	-9.5256
102.000	-450	393	-0.5058	-9.0480
104.000	-492	433	-0.5550	-8.5422
106.000	-531	478	-0.6054	-7.9872
108.000	-554	494	-0.6288	-7.3818
110.000	-610	554	-0.6984	-6.7530
112.000	-655	598	-0.7518	-6.0546
114.000	-687	630	-0.7902	-5.3028
116.000	-685	630	-0.7890	-4.5126
118.000	-585	525	-0.6660	-3.7236
120.000	-507	447	-0.5724	-3.0576
122.000	-461	400	-0.5166	-2.4852
124.000	-406	346	-0.4512	-1.9686
126.000	-346	280	-0.3756	-1.5174
128.000	-328	269	-0.3582	-1.1418
130.000	-267	205	-0.2832	-0.7836
132.000	-237	175	-0.2472	-0.5004
134.000	-235	187	-0.2532	-0.2532

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 15:30

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
2.000	-381	291	-0.4032	-49.9842
4.000	-315	228	-0.3258	-49.5810
6.000	-225	131	-0.2136	-49.2552
8.000	-304	215	-0.3114	-49.0416
10.000	-226	139	-0.2190	-48.7302
12.000	-149	66	-0.1290	-48.5112
14.000	-107	24	-0.0786	-48.3822
16.000	-183	102	-0.1710	-48.3036
18.000	-161	72	-0.1398	-48.1326
20.000	-73	-9	-0.0384	-47.9928
22.000	11	-96	0.0642	-47.9544
24.000	73	-162	0.1410	-48.0186
26.000	114	-206	0.1920	-48.1596
28.000	124	-214	0.2028	-48.3516
30.000	107	-196	0.1818	-48.5544
32.000	52	-128	0.1080	-48.7362
34.000	-56	-20	-0.0216	-48.8442
36.000	-172	96	-0.1608	-48.8226
38.000	-457	358	-0.4890	-48.6618
40.000	-533	442	-0.5850	-48.1728
42.000	-559	470	-0.6174	-47.5878
44.000	-547	459	-0.6036	-46.9704
46.000	-497	413	-0.5460	-46.3668
48.000	-475	389	-0.5184	-45.8208
50.000	-357	266	-0.3738	-45.3024
52.000	-311	222	-0.3198	-44.9286
54.000	-289	201	-0.2940	-44.6088
56.000	-249	162	-0.2466	-44.3148
58.000	-221	129	-0.2100	-44.0682
60.000	-255	172	-0.2562	-43.8582
62.000	-331	248	-0.3474	-43.6020
64.000	-398	306	-0.4224	-43.2546
66.000	-431	350	-0.4686	-42.8322
68.000	-592	498	-0.6540	-42.3636
70.000	-671	582	-0.7518	-41.7096
72.000	-731	643	-0.8244	-40.9578
74.000	-747	657	-0.8424	-40.1334
76.000	-763	679	-0.8652	-39.2910
78.000	-822	730	-0.9312	-38.4258
80.000	-809	717	-0.9156	-37.4946
82.000	-831	743	-0.9444	-36.5790
84.000	-849	758	-0.9642	-35.6346
86.000	-815	733	-0.9288	-34.6704

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

← PREVIOUS →

CURRENT

DATA SET #

3

SENSOR #

27747B

DATE

08/21/97 15:30

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR.DEV	
88.000	-855	761	-0.9696	-33.7416
90.000	-923	835	-1.0548	-32.7720
92.000	-998	913	-1.1466	-31.7172
94.000	-1016	929	-1.1670	-30.5706
96.000	-1056	968	-1.2144	-29.4036
98.000	-1121	1028	-1.2894	-28.1892
100.000	-1133	1041	-1.3044	-26.8998
102.000	-1097	1010	-1.2642	-25.5954
104.000	-1045	957	-1.2012	-24.3312
106.000	-1009	926	-1.1610	-23.1300
108.000	-1112	1024	-1.2816	-21.9690
110.000	-1117	1026	-1.2858	-20.6874
112.000	-1106	1017	-1.2738	-19.4016
114.000	-1059	970	-1.2174	-18.1278
116.000	-1049	967	-1.2096	-16.9104
118.000	-1127	1038	-1.2990	-15.7008
120.000	-1167	1081	-1.3488	-14.4018
122.000	-1230	1153	-1.4298	-13.0530
124.000	-1363	1279	-1.5852	-11.6232
126.000	-1521	1445	-1.7796	-10.0380
128.000	-1634	1544	-1.9068	-8.2584
130.000	-1703	1629	-1.9992	-6.3516
132.000	-1821	1738	-2.1354	-4.3524
134.000	-1896	1799	-2.2170	-2.2170

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

| PREVIOUS |

| CURRENT |

SURVEY RUN
WITH WHEELS

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

4

27747B

08/21/97 15:59

67

B. grouver

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR.DEV	
2.000	287	-351	0.3828	49.8594
4.000	225	-283	0.3048	49.4766
6.000	143	-200	0.2058	49.1718
8.000	226	-287	0.3078	48.9660
10.000	153	-214	0.2202	48.6582
12.000	79	-140	0.1314	48.4380
14.000	30	-95	0.0750	48.3066
16.000	107	-168	0.1650	48.2316
18.000	92	-150	0.1452	48.0666
20.000	3	-63	0.0396	47.9214
22.000	-85	25	-0.0660	47.8818
24.000	-147	88	-0.1410	47.9478
26.000	-193	133	-0.1956	48.0888
28.000	-201	142	-0.2058	48.2844
30.000	-184	124	-0.1848	48.4902
32.000	-127	66	-0.1158	48.6750
34.000	-18	-42	0.0144	48.7908
36.000	91	-151	0.1452	48.7764
38.000	367	-426	0.4758	48.6312
40.000	458	-517	0.5850	48.1554
42.000	485	-546	0.6186	47.5704
44.000	472	-533	0.6030	46.9518
46.000	422	-483	0.5430	46.3488
48.000	408	-472	0.5280	45.8058
50.000	280	-342	0.3732	45.2778
52.000	234	-295	0.3174	44.9046
54.000	213	-277	0.2940	44.5872
56.000	173	-234	0.2442	44.2932
58.000	143	-205	0.2088	44.0490
60.000	177	-239	0.2496	43.8402
62.000	255	-317	0.3432	43.5906
64.000	322	-384	0.4236	43.2474
66.000	354	-415	0.4614	42.8238
68.000	510	-571	0.6486	42.3624
70.000	597	-659	0.7536	41.7138
72.000	658	-720	0.8268	40.9602
74.000	672	-733	0.8430	40.1334
76.000	686	-747	0.8598	39.2904
78.000	747	-810	0.9342	38.4306
80.000	731	-795	0.9156	37.4964
82.000	757	-821	0.9468	36.5808
84.000	773	-837	0.9660	35.6340
86.000	738	-800	0.9228	34.6680

A

<u>Mean</u>	<u>Std. Dev.</u>
-61.8	2.1

B

<u>Mean</u>	<u>Std. Dev.</u>
-89.0	5.2

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

← PREVIOUS →

← CURRENT →

DATA SET #

4

SENSOR #

27747B

DATE

08/21/97 15:59

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR.DEV	
88.000	776	-838	0.9684	33.7452
90.000	844	-907	1.0506	32.7768
92.000	925	-987	1.1472	31.7262
94.000	940	-1005	1.1670	30.5790
96.000	982	-1042	1.2144	29.4120
98.000	1045	-1107	1.2912	28.1976
100.000	1058	-1121	1.3074	26.9064
102.000	1025	-1088	1.2678	25.5990
104.000	970	-1033	1.2018	24.3312
106.000	934	-997	1.1586	23.1294
108.000	1035	-1102	1.2822	21.9708
110.000	1043	-1106	1.2894	20.6886
112.000	1031	-1095	1.2756	19.3992
114.000	983	-1046	1.2174	18.1236
116.000	975	-1033	1.2048	16.9062
118.000	1051	-1117	1.3008	15.7014
120.000	1087	-1151	1.3428	14.4006
122.000	1158	-1220	1.4268	13.0578
124.000	1281	-1347	1.5768	11.6310
126.000	1452	-1511	1.7778	10.0542
128.000	1562	-1625	1.9122	8.2764
130.000	1633	-1693	1.9956	6.3642
132.000	1761	-1824	2.1510	4.3686
134.000	1815	-1881	2.2176	2.2176

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

[PREVIOUS]

[CURRENT]

4

27747B

08/21/97 15:59

67

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
2.000	-561	487	-0.6288	-26.5710
4.000	-557	483	-0.6240	-25.9422
6.000	-544	458	-0.6012	-25.3182
8.000	-465	375	-0.5040	-24.7170
10.000	-463	374	-0.5022	-24.2130
12.000	-390	308	-0.4188	-23.7108
14.000	-582	490	-0.5432	-23.2920
16.000	-593	505	-0.6588	-22.6488
18.000	-519	442	-0.5766	-21.9900
20.000	-403	317	-0.4320	-21.4134
22.000	-329	245	-0.3444	-20.9814
24.000	-236	153	-0.2334	-20.6370
26.000	-143	55	-0.1188	-20.4036
28.000	-103	14	-0.0702	-20.2848
30.000	-98	10	-0.0648	-20.2146
32.000	-102	10	-0.0672	-20.1498
34.000	-80	-6	-0.0444	-20.0826
36.000	-33	-43	0.0060	-20.0382
38.000	-26	-63	0.0222	-20.0442
40.000	-25	-63	0.0228	-20.0664
42.000	-1	-90	0.0534	-20.0892
44.000	-5	-85	0.0480	-20.1426
46.000	-20	-67	0.0282	-20.1906
48.000	-105	17	-0.0732	-20.2188
50.000	-269	182	-0.2706	-20.1456
52.000	-385	294	-0.4074	-19.8750
54.000	-412	323	-0.4410	-19.4676
56.000	-427	338	-0.4590	-19.0266
58.000	-461	368	-0.4974	-18.5676
60.000	-427	339	-0.4596	-18.0702
62.000	-381	290	-0.4026	-17.6106
64.000	-323	238	-0.3366	-17.2080
66.000	-279	199	-0.2868	-16.8714
68.000	-198	111	-0.1854	-16.5846
70.000	-205	113	-0.1908	-16.3992
72.000	-229	138	-0.2202	-16.2084
74.000	-251	160	-0.2466	-15.9882
76.000	-297	204	-0.3006	-15.7416
78.000	-339	247	-0.3516	-15.4410
80.000	-398	307	-0.4230	-15.0894
82.000	-481	387	-0.5208	-14.6664
84.000	-533	441	-0.5844	-14.1456
86.000	-544	454	-0.5988	-13.5612

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 21, 1997

SITE: BMTDAM HOLE NUMBER IC9603

site description Sta. 3+50, Offset 75' Downstream

[PREVIOUS] [CURRENT]

DATA SET #

4

SENSOR #

27747B

DATE

08/21/97 15:59

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV.	
88.000	-554	462	-0.6096	-12.9624
90.000	-570	477	-0.6282	-12.3528
92.000	-557	464	-0.6126	-11.7246
94.000	-531	439	-0.5820	-11.1120
96.000	-489	399	-0.5328	-10.5300
98.000	-428	336	-0.4584	-9.9972
100.000	-443	350	-0.4758	-9.5388
102.000	-469	375	-0.5064	-9.0630
104.000	-509	415	-0.5544	-8.5566
106.000	-549	459	-0.6048	-8.0022
108.000	-574	477	-0.6306	-7.3974
110.000	-626	536	-0.6972	-6.7668
112.000	-672	579	-0.7506	-6.0696
114.000	-703	611	-0.7884	-5.3190
116.000	-689	613	-0.7812	-4.5306
118.000	-599	515	-0.6684	-3.7494
120.000	-533	437	-0.5820	-3.0810
122.000	-485	389	-0.5244	-2.4990
124.000	-429	337	-0.4596	-1.9746
126.000	-365	269	-0.3804	-1.5150
128.000	-342	247	-0.3534	-1.1346
130.000	-277	192	-0.2814	-0.7812
132.000	-251	158	-0.2454	-0.4998
134.000	-259	165	-0.2544	-0.2544

END OF RECORDS

INCLINOMETER IC-96-4

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997
 SITE: BMTDAM HOLE NUMBER IC9604
 site description Uploaded from DataMate

DATA SET #	<u>PREVIOUS</u>	<u>CURRENT</u>
SENSOR #		1
DATE		27747B
READINGS PER DIRECTION		08/22/97 10:23
SENSOR:	27747B	72

DEPTH	<u>CURRENT DATA</u>			CUM. DEV. IN.
	A0	A180	INCR.DEV	
2.000	(A ₀ - A ₁₈₀) . 1/2 x 10 ⁻⁴ 12.4	851	-911.	5.0154
4.000		818	-874	3.9582
6.000		502	-560	2.9430
8.000		165	-221	2.3058
10.000		-168	110	2.0742
12.000		-311	253	2.2410
14.000		-153	94	2.5794
16.000		-89	29	2.7276
18.000		-61	5	2.7984
20.000		12	-70	2.8380
22.000		26	-85	2.7888
24.000		43	-102	2.7222
26.000		79	-138	2.6352
28.000		19	-74	2.5050
30.000		-86	25	2.4492
32.000		-225	170	2.5158
34.000		-394	338	2.7528
36.000		-386	328	3.1920
38.000		-174	118	3.6204
40.000		-41	-19	3.7956
42.000		-11	-46	3.8088
44.000		-8	-51	3.7878
46.000		-11	-46	3.7620
48.000		19	-78	3.7410
50.000		58	-117	3.6828
52.000		85	-142	3.5778
54.000		121	-180	3.4416
56.000		182	-239	3.2610
58.000		218	-274	3.0084
60.000		234	-293	2.7132
62.000		201	-261	2.3970
64.000		185	-242	2.1198
66.000		159	-218	1.8636
68.000		143	-201	1.6374
70.000		145	-202	1.4310
72.000		212	-270	1.2228
74.000		273	-331	0.9336
76.000		323	-382	0.5712
78.000		336	-394	0.1482
80.000		327	-386	-0.2898
82.000		274	-329	-0.7176
84.000		208	-267	-1.0794
86.000		153	-208	-1.3644

A B
Mean Std. Dev. Mean Std. Dev.
 -57.6 1.8 -91.7 4.2

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997
 SITE: BMTDAM HOLE NUMBER IC9604
 site description Uploaded from DataMate

| PREVIOUS |

| CURRENT |

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 10:23

READINGS PER DIRECTION

72

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
88.000	44	-98	0.0852	-1.5810
90.000	-115	56	-0.1026	-1.6662
92.000	-203	148	-0.2106	-1.5636
94.000	-256	198	-0.2724	-1.3530
96.000	-277	219	-0.2976	-1.0806
98.000	-337	277	-0.3684	-0.7830
100.000	-371	312	-0.4098	-0.4146
102.000	-347	289	-0.3816	-0.0048
104.000	-282	224	-0.3036	0.3768
106.000	-211	154	-0.2190	0.6804
108.000	-174	118	-0.1752	0.8994
110.000	-163	106	-0.1614	1.0746
112.000	-195	137	-0.1992	1.2360
114.000	-199	143	-0.2052	1.4352
116.000	-224	162	-0.2316	1.6404
118.000	-229	170	-0.2394	1.8720
120.000	-200	146	-0.2076	2.1114
122.000	-192	134	-0.1956	2.3190
124.000	-59	2	-0.0366	2.5146
126.000	112	-173	0.1710	2.5512
128.000	274	-333	0.3642	2.3802
130.000	321	-374	0.4170	2.0160
132.000	321	-378	0.4194	1.5990
134.000	301	-355	0.3936	1.1796
136.000	231	-287	0.3108	0.7860
138.000	113	-170	0.1698	0.4752
140.000	65	-123	0.1128	0.3054
142.000	33	-91	0.0744	0.1926
144.000	71	-126	0.1182	0.1182

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997
 SITE: BMTDAM HOLE NUMBER IC9604
 site description Uploaded from DataMate
 DATA SET #
 SENSOR #
 DATE
 READINGS PER DIRECTION
 SENSOR: 27747B

[PREVIOUS]

[CURRENT]

1

27747B

08/22/97 10:23

72

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
2.000	502	-590	0.6552	15.9828
4.000	306	-391	0.4182	15.3276
6.000	58	-153	0.1266	14.9094
8.000	-130	46	-0.1056	14.7828
10.000	-267	178	-0.2670	14.8884
12.000	-215	119	-0.2004	15.1554
14.000	73	-170	0.1458	15.3558
16.000	108	-203	0.1866	15.2100
18.000	102	-181	0.1698	15.0234
20.000	91	-181	0.1632	14.8536
22.000	81	-177	0.1548	14.6904
24.000	77	-170	0.1482	14.5356
26.000	54	-150	0.1224	14.3874
28.000	89	-182	0.1626	14.2650
30.000	250	-338	0.3528	14.1024
32.000	278	-369	0.3882	13.7496
34.000	211	-298	0.3054	13.3614
36.000	71	-163	0.1404	13.0560
38.000	-177	88	-0.1590	12.9156
40.000	-314	221	-0.3210	13.0746
42.000	-333	241	-0.3444	13.3956
44.000	-397	302	-0.4194	13.7400
46.000	-458	365	-0.4938	14.1594
48.000	-373	274	-0.3882	14.6532
50.000	-178	84	-0.1572	15.0414
52.000	-174	79	-0.1518	15.1986
54.000	-163	69	-0.1392	15.3504
56.000	-122	26	-0.0888	15.4896
58.000	-78	-11	-0.0402	15.5784
60.000	13	-106	0.0714	15.6186
62.000	7	-100	0.0642	15.5472
64.000	-53	-42	-0.0066	15.4830
66.000	-94	3	-0.0582	15.4896
68.000	-116	30	-0.0876	15.5478
70.000	-62	-29	-0.0198	15.6354
72.000	16	-110	0.0756	15.6552
74.000	78	-175	0.1518	15.5796
76.000	158	-246	0.2424	15.4278
78.000	258	-342	0.3600	15.1854
80.000	349	-441	0.4740	14.8254
82.000	362	-456	0.4908	14.3514
84.000	423	-514	0.5622	13.8606
86.000	464	-558	0.6132	13.2984

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997

SITE: BMTDAM HOLE NUMBER IC9604

site description Uploaded from DataMate

|← PREVIOUS |

| CURRENT |

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 10:23

READINGS PER DIRECTION

72

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
88.000	432	-525	0.5742	12.6852
90.000	355	-447	0.4812	12.1110
92.000	258	-350	0.3648	11.6298
94.000	157	-248	0.2430	11.2650
96.000	87	-178	0.1590	11.0220
98.000	91	-177	0.1608	10.8630
100.000	174	-271	0.2670	10.7022
102.000	196	-293	0.2934	10.4352
104.000	154	-247	0.2406	10.1418
106.000	109	-202	0.1866	9.9012
108.000	102	-192	0.1764	9.7146
110.000	184	-269	0.2718	9.5382
112.000	270	-369	0.3834	9.2664
114.000	335	-430	0.4590	8.8830
116.000	387	-473	0.5160	8.4240
118.000	484	-568	0.6312	7.9080
120.000	501	-585	0.6516	7.2768
122.000	401	-494	0.5370	6.6252
124.000	339	-434	0.4638	6.0882
126.000	379	-476	0.5130	5.6244
128.000	397	-486	0.5298	5.1114
130.000	394	-489	0.5298	4.5816
132.000	399	-488	0.5322	4.0518
134.000	367	-464	0.4986	3.5196
136.000	411	-506	0.5502	3.0210
138.000	466	-553	0.6114	2.4708
140.000	530	-623	0.6918	1.8594
142.000	490	-583	0.6438	1.1676
144.000	394	-479	0.5238	0.5238

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997
 SITE: BMTDAM HOLE NUMBER IC9604
 site description Uploaded from DataMate

DATA SET #	PREVIOUS	CURRENT
SENSOR #		2
DATE		27747B
READINGS PER DIRECTION		08/22/97 10:49
SENSOR: 27747B		72

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV.	
2.000	849	-911	1.0560	5.0064
4.000	818	-874	1.0152	3.9504
6.000	505	-565	0.6420	2.9352
8.000	164	-223	0.2322	2.2932
10.000	-171	111	-0.1692	2.0610
12.000	-313	254	-0.3402	2.2302
14.000	-154	93	-0.1482	2.5704
16.000	-89	29	-0.0708	2.7186
18.000	-63	3	-0.0396	2.7894
20.000	11	-71	0.0492	2.8290
22.000	25	-86	0.0666	2.7798
24.000	42	-101	0.0858	2.7132
26.000	78	-139	0.1302	2.6274
28.000	17	-77	0.0564	2.4972
30.000	-85	23	-0.0648	2.4408
32.000	-227	165	-0.2352	2.5056
34.000	-395	335	-0.4380	2.7408
36.000	-390	328	-0.4308	3.1788
38.000	-177	115	-0.1752	3.6096
40.000	-43	-18	-0.0150	3.7848
42.000	-14	-47	0.0198	3.7998
44.000	-9	-52	0.0258	3.7800
46.000	-13	-49	0.0216	3.7542
48.000	17	-78	0.0570	3.7326
50.000	57	-118	0.1050	3.6756
52.000	82	-143	0.1350	3.5706
54.000	119	-180	0.1794	3.4356
56.000	181	-242	0.2538	3.2562
58.000	215	-275	0.2940	3.0024
60.000	234	-294	0.3168	2.7084
62.000	201	-261	0.2772	2.3916
64.000	182	-243	0.2550	2.1144
66.000	158	-219	0.2262	1.8594
68.000	142	-203	0.2070	1.6332
70.000	143	-204	0.2082	1.4262
72.000	211	-270	0.2886	1.2180
74.000	271	-331	0.3612	0.9294
76.000	322	-383	0.4230	0.5682
78.000	334	-395	0.4374	0.1452
80.000	327	-389	0.4296	-0.2922
82.000	272	-333	0.3630	-0.7218
84.000	207	-268	0.2850	-1.0848
86.000	150	-209	0.2154	-1.3698

A B
Mean Srd. Dev. Mean Srd. Dev.
 -60.4 1.4 -93.6 3.9

Printed by DMM on August 22, 1997
 SITE: BMTDAM HOLE NUMBER IC9604
 site description Uploaded from DataMate

← PREVIOUS →

← CURRENT →

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 10:49

READINGS PER DIRECTION

72

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
88.000	42	-99	0.0846	-1.5852
90.000	-115	55	-0.1020	-1.6698
92.000	-206	147	-0.2118	-1.5678
94.000	-258	197	-0.2730	-1.3560
96.000	-279	218	-0.2982	-1.0830
98.000	-336	276	-0.3672	-0.7848
100.000	-373	311	-0.4104	-0.4176
102.000	-349	288	-0.3822	-0.0072
104.000	-283	222	-0.3030	0.3750
106.000	-214	153	-0.2202	0.6780
108.000	-176	117	-0.1758	0.8982
110.000	-166	105	-0.1626	1.0740
112.000	-195	135	-0.1980	1.2366
114.000	-201	142	-0.2058	1.4346
116.000	-223	162	-0.2310	1.6404
118.000	-230	166	-0.2376	1.8714
120.000	-203	145	-0.2088	2.1090
122.000	-194	133	-0.1962	2.3178
124.000	-59	0	-0.0354	2.5140
126.000	113	-173	0.1716	2.5494
128.000	273	-334	0.3642	2.3778
130.000	318	-377	0.4170	2.0136
132.000	322	-380	0.4212	1.5966
134.000	298	-356	0.3924	1.1754
136.000	229	-287	0.3096	0.7830
138.000	111	-173	0.1704	0.4734
140.000	62	-126	0.1128	0.3030
142.000	31	-91	0.0732	0.1902
144.000	69	-126	0.1170	0.1170

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997
 SITE: BMTDAM HOLE NUMBER IC9604
 site description Uploaded from DataMate

DATA SET #	PREVIOUS	CURRENT
SENSOR #		2
DATE		27747B
READINGS PER DIRECTION		08/22/97 10:49
SENSOR: 27747B		72

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR.DEV	
2.000	471	-568	0.6234	15.7062
4.000	280	-378	0.3948	15.0828
6.000	57	-148	0.1230	14.6880
8.000	-133	46	-0.1074	14.5650
10.000	-267	177	-0.2664	14.6724
12.000	-214	123	-0.2022	14.9388
14.000	68	-166	0.1404	15.1410
16.000	106	-202	0.1848	15.0006
18.000	99	-181	0.1680	14.8158
20.000	90	-181	0.1626	14.6478
22.000	78	-175	0.1518	14.4852
24.000	74	-171	0.1470	14.3334
26.000	51	-148	0.1194	14.1864
28.000	87	-178	0.1590	14.0670
30.000	245	-338	0.3498	13.9080
32.000	277	-366	0.3858	13.5582
34.000	210	-297	0.3042	13.1724
36.000	70	-163	0.1398	12.8682
38.000	-182	90	-0.1632	12.7284
40.000	-316	221	-0.3222	12.8916
42.000	-335	245	-0.3480	13.2138
44.000	-401	305	-0.4236	13.5618
46.000	-461	366	-0.4962	13.9854
48.000	-375	274	-0.3894	14.4816
50.000	-181	84	-0.1590	14.8710
52.000	-178	81	-0.1554	15.0300
54.000	-167	70	-0.1422	15.1854
56.000	-126	27	-0.0918	15.3276
58.000	-78	-10	-0.0408	15.4194
60.000	10	-106	0.0696	15.4602
62.000	4	-97	0.0606	15.3906
64.000	-57	-40	-0.0102	15.3300
66.000	-97	4	-0.0606	15.3402
68.000	-119	31	-0.0900	15.4008
70.000	-65	-27	-0.0228	15.4908
72.000	14	-108	0.0732	15.5136
74.000	76	-174	0.1500	15.4404
76.000	154	-244	0.2388	15.2904
78.000	251	-339	0.3540	15.0516
80.000	345	-441	0.4716	14.6976
82.000	359	-455	0.4884	14.2260
84.000	418	-513	0.5586	13.7376
86.000	459	-556	0.6090	13.1790

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997

SITE: BMTDAM HOLE NUMBER IC9604

site description Uploaded from DataMate

| PREVIOUS |

| CURRENT |

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 10:49

READINGS PER DIRECTION

72

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
88.000	430	-521	0.5706	12.5700
90.000	354	-443	0.4782	11.9994
92.000	255	-348	0.3618	11.5212
94.000	153	-245	0.2388	11.1594
96.000	82	-176	0.1548	10.9206
98.000	86	-175	0.1566	10.7658
100.000	172	-269	0.2646	10.6092
102.000	193	-289	0.2892	10.3446
104.000	151	-243	0.2364	10.0554
106.000	105	-200	0.1830	9.8190
108.000	94	-192	0.1716	9.6360
110.000	177	-270	0.2682	9.4644
112.000	266	-365	0.3786	9.1962
114.000	333	-427	0.4560	8.8176
116.000	381	-470	0.5106	8.3616
118.000	481	-571	0.6312	7.8510
120.000	495	-582	0.6462	7.2198
122.000	396	-490	0.5316	6.5736
124.000	335	-432	0.4602	6.0420
126.000	374	-473	0.5082	5.5818
128.000	394	-485	0.5274	5.0736
130.000	392	-487	0.5274	4.5462
132.000	395	-487	0.5292	4.0188
134.000	364	-461	0.4950	3.4896
136.000	409	-505	0.5484	2.9946
138.000	463	-549	0.6072	2.4462
140.000	526	-622	0.6888	1.8390
142.000	486	-577	0.6378	1.1502
144.000	376	-478	0.5124	0.5124

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997
 SITE: BMTDAM HOLE NUMBER IC9604
 site description Uploaded from DataMate

| PREVIOUS |

| CURRENT |

3

27747B

08/22/97 11:21

72

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
2.000	842	-905	1.0482	5.0130
4.000	811	-873	1.0104	3.9648
6.000	502	-563	0.6390	2.9544
8.000	160	-222	0.2292	2.3154
10.000	-174	110	-0.1704	2.0862
12.000	-311	251	-0.3372	2.2566
14.000	-153	93	-0.1476	2.5938
16.000	-89	28	-0.0702	2.7414
18.000	-62	3	-0.0390	2.8116
20.000	13	-71	0.0504	2.8506
22.000	26	-86	0.0672	2.8002
24.000	43	-103	0.0876	2.7330
26.000	78	-139	0.1302	2.6454
28.000	15	-75	0.0540	2.5152
30.000	-87	26	-0.0678	2.4612
32.000	-227	167	-0.2364	2.5290
34.000	-397	337	-0.4404	2.7654
36.000	-389	327	-0.4296	3.2058
38.000	-174	111	-0.1710	3.6354
40.000	-42	-19	-0.0138	3.8064
42.000	-13	-47	0.0204	3.8202
44.000	-9	-52	0.0258	3.7998
46.000	-10	-50	0.0240	3.7740
48.000	18	-79	0.0582	3.7500
50.000	57	-118	0.1050	3.6918
52.000	82	-144	0.1356	3.5868
54.000	120	-181	0.1806	3.4512
56.000	182	-241	0.2538	3.2706
58.000	217	-276	0.2958	3.0168
60.000	233	-294	0.3162	2.7210
62.000	200	-262	0.2772	2.4048
64.000	182	-243	0.2550	2.1276
66.000	159	-218	0.2262	1.8726
68.000	143	-202	0.2070	1.6464
70.000	143	-203	0.2076	1.4394
72.000	213	-273	0.2916	1.2318
74.000	271	-332	0.3618	0.9402
76.000	322	-383	0.4230	0.5784
78.000	336	-394	0.4380	0.1554
80.000	327	-387	0.4284	-0.2826
82.000	273	-331	0.3624	-0.7110
84.000	208	-269	0.2862	-1.0734
86.000	149	-210	0.2154	-1.3596

AMean

-60.5

Sd./Dev.

1.4

BMean

-93.9

Sd./Dev.

4.4

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997
 SITE: BMTDAM HOLE NUMBER IC9604
 site description Uploaded from DataMate

| PREVIOUS |

| CURRENT |

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 11:21

READINGS PER DIRECTION

72

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
88.000	41	-100	0.0846	-1.5750
90.000	-116	56	-0.1032	-1.6596
92.000	-205	146	-0.2106	-1.5564
94.000	-258	198	-0.2736	-1.3458
96.000	-279	217	-0.2976	-1.0722
98.000	-337	275	-0.3672	-0.7746
100.000	-374	311	-0.4110	-0.4074
102.000	-348	287	-0.3810	0.0036
104.000	-282	223	-0.3030	0.3846
106.000	-213	153	-0.2196	0.6876
108.000	-174	116	-0.1740	0.9072
110.000	-165	104	-0.1614	1.0812
112.000	-196	135	-0.1986	1.2426
114.000	-203	142	-0.2070	1.4412
116.000	-223	162	-0.2310	1.6482
118.000	-229	167	-0.2376	1.8792
120.000	-202	143	-0.2070	2.1168
122.000	-192	131	-0.1938	2.3238
124.000	-58	-3	-0.0330	2.5176
126.000	111	-174	0.1710	2.5506
128.000	276	-335	0.3666	2.3796
130.000	318	-377	0.4170	2.0130
132.000	322	-380	0.4212	1.5960
134.000	298	-358	0.3936	1.1748
136.000	226	-288	0.3084	0.7812
138.000	111	-171	0.1692	0.4728
140.000	62	-123	0.1110	0.3036
142.000	32	-90	0.0732	0.1926
144.000	70	-129	0.1194	0.1194

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997
 SITE: BMTDAM HOLE NUMBER IC9604
 site description Uploaded from DataMate

DATA SET #
 SENSOR #
 DATE
 READINGS PER DIRECTION
 SENSOR: 27747B

[PREVIOUS]

[CURRENT]

3

27747B

08/22/97 11:21

72

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR.DEV	
2.000	474	-565	0.6234	15.8364
4.000	281	-376	0.3942	15.2130
6.000	52	-149	0.1206	14.8188
8.000	-129	43	-0.1032	14.6982
10.000	-273	177	-0.2700	14.8014
12.000	-214	121	-0.2010	15.0714
14.000	69	-167	0.1416	15.2724
16.000	106	-202	0.1848	15.1308
18.000	101	-182	0.1698	14.9460
20.000	92	-182	0.1644	14.7762
22.000	82	-177	0.1554	14.6118
24.000	75	-171	0.1476	14.4564
26.000	51	-147	0.1188	14.3068
28.000	92	-187	0.1674	14.1900
30.000	251	-340	0.3546	14.0226
32.000	279	-370	0.3894	13.6680
34.000	210	-299	0.3054	13.2786
36.000	69	-164	0.1398	12.9732
38.000	-182	94	-0.1656	12.8334
40.000	-318	223	-0.3246	12.9990
42.000	-334	241	-0.3450	13.3236
44.000	-398	304	-0.4212	13.6686
46.000	-458	365	-0.4938	14.0898
48.000	-375	269	-0.3864	14.5836
50.000	-181	85	-0.1596	14.9700
52.000	-178	82	-0.1560	15.1296
54.000	-165	70	-0.1410	15.2856
56.000	-123	25	-0.0888	15.4266
58.000	-77	-14	-0.0378	15.5154
60.000	11	-107	0.0708	15.5532
62.000	5	-100	0.0630	15.4824
64.000	-56	-41	-0.0090	15.4194
66.000	-97	3	-0.0600	15.4284
68.000	-115	29	-0.0864	15.4884
70.000	-61	-31	-0.0180	15.5748
72.000	15	-112	0.0762	15.5928
74.000	76	-175	0.1506	15.5166
76.000	154	-243	0.2382	15.3660
78.000	256	-341	0.3582	15.1278
80.000	348	-442	0.4740	14.7696
82.000	362	-459	0.4926	14.2956
84.000	420	-516	0.5616	13.8030
86.000	460	-559	0.6114	13.2414

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 22, 1997

SITE: BMTDAM HOLE NUMBER IC9604

site description Uploaded from DataMate

[PREVIOUS]

[CURRENT]

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 11:21

READINGS PER DIRECTION

72

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
88.000	430	-524	0.5724	12.6300
90.000	354	-445	0.4794	12.0576
92.000	258	-351	0.3654	11.5782
94.000	154	-249	0.2418	11.2128
96.000	82	-179	0.1566	10.9710
98.000	87	-177	0.1584	10.8144
100.000	171	-270	0.2646	10.6560
102.000	194	-290	0.2904	10.3914
104.000	153	-247	0.2400	10.1010
106.000	106	-203	0.1854	9.8610
108.000	97	-194	0.1746	9.6756
110.000	176	-271	0.2682	9.5010
112.000	266	-366	0.3792	9.2328
114.000	334	-428	0.4572	8.8536
116.000	380	-470	0.5100	8.3964
118.000	484	-569	0.6318	7.8864
120.000	495	-588	0.6498	7.2546
122.000	395	-494	0.5334	6.6048
124.000	334	-433	0.4602	6.0714
126.000	375	-473	0.5088	5.6112
128.000	395	-485	0.5280	5.1024
130.000	394	-489	0.5298	4.5744
132.000	395	-492	0.5322	4.0446
134.000	364	-466	0.4980	3.5124
136.000	410	-506	0.5496	3.0144
138.000	467	-550	0.6102	2.4648
140.000	529	-622	0.6906	1.8546
142.000	489	-582	0.6426	1.1640
144.000	390	-479	0.5214	0.5214

END OF RECORDS

INCLINOMETER IC-96-5

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 13:12

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV.
	A0	A180	INCR. DEV	IN.
2.000	-157	127	-0.1704	5.2206
4.000	-53	7	-0.0360	5.3910
6.000	86	-146	0.1392	5.4270
8.000	38	-97	0.0810	5.2878
10.000	-73	14	-0.0522	5.2068
12.000	121	-178	0.1794	5.2590
14.000	138	-197	0.2010	5.0796
16.000	-105	46	-0.0906	4.8786
18.000	-178	121	-0.1794	4.9692
20.000	-150	89	-0.1434	5.1486
22.000	-182	121	-0.1818	5.2920
24.000	-194	136	-0.1980	5.4738
26.000	-183	125	-0.1848	5.6718
28.000	-121	64	-0.1110	5.8566
30.000	-122	63	-0.1110	5.9676
32.000	-102	43	-0.0870	6.0786
34.000	-81	21	-0.0612	6.1656
36.000	-95	35	-0.0780	6.2268
38.000	-70	13	-0.0498	6.3048
40.000	-9	-51	0.0252	6.3546
42.000	-31	-27	-0.0024	6.3294
44.000	-41	-20	-0.0126	6.3318
46.000	-54	-6	-0.0288	6.3444
48.000	-29	-31	0.0012	6.3732
50.000	107	-165	0.1632	6.3720
52.000	167	-222	0.2334	6.2088
54.000	184	-243	0.2562	5.9754
56.000	142	-202	0.2064	5.7192
58.000	174	-235	0.2454	5.5128
60.000	317	-375	0.4152	5.2674
62.000	277	-334	0.3666	4.8522
64.000	402	-458	0.5160	4.4856
66.000	501	-559	0.6360	3.9696
68.000	489	-548	0.6222	3.3336
70.000	538	-600	0.6828	2.7114
72.000	470	-529	0.5994	2.0286
74.000	318	-377	0.4170	1.4292
76.000	222	-282	0.3024	1.0122
78.000	78	-138	0.1296	0.7098
80.000	-65	4	-0.0414	0.5802
82.000	-121	60	-0.1086	0.6216
84.000	-242	183	-0.2550	0.7302
86.000	-337	276	-0.3678	0.9852

A

Mea

STN. DEVR.

B

MEAN

STD. DEVR.

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 13:12

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
88.000	-405	343	-0.4488	1.3530
90.000	-425	365	-0.4740	1.8018
92.000	-465	402	-0.5202	2.2758
94.000	-533	470	-0.6018	2.7960
96.000	-582	520	-0.6612	3.3978
98.000	-570	506	-0.6456	4.0590
100.000	-507	442	-0.5694	4.7046
102.000	-413	350	-0.4578	5.2740
104.000	-312	245	-0.3342	5.7318
106.000	-219	153	-0.2232	6.0660
108.000	-176	114	-0.1740	6.2892
110.000	-66	3	-0.0414	6.4632
112.000	138	-203	0.2046	6.5046
114.000	341	-403	0.4464	6.3000
116.000	377	-438	0.4890	5.8536
118.000	399	-462	0.5166	5.3646
120.000	437	-501	0.5628	4.8480
122.000	468	-531	0.5994	4.2852
124.000	494	-555	0.6294	3.6858
126.000	526	-586	0.6672	3.0564
128.000	526	-587	0.6678	2.3892
130.000	473	-538	0.6066	1.7214
132.000	452	-514	0.5796	1.1148
134.000	414	-478	0.5352	0.5352

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

-- PREVIOUS -- -- CURRENT --

DATA SET #	1
SENSOR #	27747B
DATE	08/22/97 13:12
READINGS PER DIRECTION	67
SENSOR:	27747B

DEPTH	CURRENT DATA			CUM. DEV.
	B0	B180	INCR. DEV	
2.000	228	-317	0.3270	-21.6408
4.000	235	-324	0.3354	-21.9678
6.000	271	-365	0.3816	-22.3032
8.000	257	-344	0.3606	-22.6848
10.000	164	-257	0.2526	-23.0454
12.000	166	-261	0.2562	-23.2980
14.000	217	-307	0.3144	-23.5542
16.000	82	-166	0.1488	-23.8686
18.000	115	-202	0.1902	-24.0174
20.000	179	-264	0.2658	-24.2076
22.000	188	-277	0.2790	-24.4734
24.000	209	-297	0.3036	-24.7524
26.000	225	-313	0.3228	-25.0560
28.000	238	-331	0.3414	-25.3788
30.000	250	-341	0.3546	-25.7202
32.000	221	-313	0.3204	-26.0748
34.000	171	-269	0.2640	-26.3952
36.000	192	-286	0.2868	-26.6592
38.000	242	-341	0.3498	-26.9460
40.000	251	-347	0.3588	-27.2958
42.000	205	-299	0.3024	-27.6546
44.000	202	-298	0.3000	-27.9570
46.000	175	-269	0.2664	-28.2570
48.000	230	-331	0.3366	-28.5234
50.000	345	-442	0.4722	-28.8600
52.000	385	-483	0.5208	-29.3322
54.000	400	-495	0.5370	-29.8530
56.000	381	-477	0.5148	-30.3900
58.000	365	-461	0.4956	-30.9048
60.000	290	-390	0.4080	-31.4004
62.000	273	-370	0.3858	-31.8084
64.000	234	-329	0.3378	-32.1942
66.000	123	-221	0.2064	-32.5320
68.000	-2	-90	0.0528	-32.7384
70.000	-146	49	-0.1170	-32.7912
72.000	-209	110	-0.1914	-32.6742
74.000	-266	163	-0.2574	-32.4828
76.000	-314	217	-0.3186	-32.2254
78.000	-363	259	-0.3732	-31.9068
80.000	-374	278	-0.3912	-31.5336
82.000	-394	297	-0.4146	-31.1424
84.000	-438	341	-0.4674	-30.7278
86.000	-494	395	-0.5334	-30.2604

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

++ PREVIOUS --+ -- CURRENT --+

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 13:12

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR.DEV	
88.000	-527	439	-0.5796	-29.7270
90.000	-545	451	-0.5976	-29.1474
92.000	-610	517	-0.6762	-28.5498
94.000	-708	622	-0.7980	-27.8736
96.000	-842	753	-0.9570	-27.0756
98.000	-962	871	-1.0998	-26.1186
100.000	-1096	1009	-1.2630	-25.0188
102.000	-1266	1172	-1.4628	-23.7558
104.000	-1365	1272	-1.5822	-22.2930
106.000	-1419	1326	-1.6470	-20.7108
108.000	-1384	1291	-1.6050	-19.0638
110.000	-1319	1221	-1.5240	-17.4588
112.000	-1246	1155	-1.4406	-15.9348
114.000	-1147	1053	-1.3200	-14.4942
116.000	-1117	1019	-1.2816	-13.1742
118.000	-1123	1027	-1.2900	-11.8926
120.000	-1137	1041	-1.3068	-10.6026
122.000	-1136	1040	-1.3056	-9.2958
124.000	-1154	1061	-1.3290	-7.9902
126.000	-1174	1080	-1.3524	-6.6612
128.000	-1177	1081	-1.3548	-5.3088
130.000	-1155	1061	-1.3296	-3.9540
132.000	-1142	1046	-1.3128	-2.6244
134.000	-1139	1047	-1.3116	-1.3116

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 13:43

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV.
	A0	A180	INCR. DEV	IN.
2.000	-199	136	-0.2010	5.0280
4.000	-75	21	-0.0576	5.2290
6.000	87	-146	0.1398	5.2866
8.000	38	-98	0.0816	5.1468
10.000	-73	15	-0.0528	5.0652
12.000	119	-175	0.1764	5.1180
14.000	137	-199	0.2016	4.9416
16.000	-105	44	-0.0894	4.7400
18.000	-181	121	-0.1812	4.8294
20.000	-149	89	-0.1428	5.0106
22.000	-182	122	-0.1824	5.1534
24.000	-197	135	-0.1992	5.3358
26.000	-186	127	-0.1878	5.5350
28.000	-123	62	-0.1110	5.7228
30.000	-121	63	-0.1104	5.8338
32.000	-104	45	-0.0894	5.9442
34.000	-83	23	-0.0636	6.0336
36.000	-97	35	-0.0792	6.0972
38.000	-74	15	-0.0534	6.1764
40.000	-11	-49	0.0228	6.2298
42.000	-33	-26	-0.0042	6.2070
44.000	-42	-18	-0.0144	6.2112
46.000	-56	-5	-0.0306	6.2256
48.000	-29	-25	-0.0024	6.2562
50.000	104	-162	0.1596	6.2586
52.000	163	-221	0.2304	6.0990
54.000	183	-243	0.2556	5.8686
56.000	141	-201	0.2052	5.6130
58.000	168	-230	0.2388	5.4078
60.000	316	-374	0.4140	5.1690
62.000	275	-334	0.3654	4.7550
64.000	397	-458	0.5130	4.3896
66.000	499	-559	0.6348	3.8766
68.000	486	-545	0.6186	3.2418
70.000	538	-599	0.6822	2.6232
72.000	469	-527	0.5976	1.9410
74.000	315	-376	0.4146	1.3434
76.000	220	-282	0.3012	0.9288
78.000	76	-137	0.1278	0.6276
80.000	-66	6	-0.0432	0.4998
82.000	-121	63	-0.1104	0.5430
84.000	-245	184	-0.2574	0.6534
86.000	-339	278	-0.3702	0.9108

A

Mean

-60.5

STD. Devia.

2.6

B

Mean

-48.4

Std. Dev.

4.5

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

-- PREVIOUS --+ -- CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 13:43

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
88.000	-408	347	-0.4530	1.2810
90.000	-428	366	-0.4764	1.7340
92.000	-466	403	-0.5214	2.2104
94.000	-534	471	-0.6030	2.7318
96.000	-583	522	-0.6630	3.3348
98.000	-574	510	-0.6504	3.9978
100.000	-511	446	-0.5742	4.6482
102.000	-419	350	-0.4614	5.2224
104.000	-313	250	-0.3378	5.6838
106.000	-221	159	-0.2280	6.0216
108.000	-172	121	-0.1758	6.2496
110.000	-68	6	-0.0444	6.4254
112.000	137	-201	0.2028	6.4698
114.000	338	-401	0.4434	6.2670
116.000	375	-437	0.4872	5.8236
118.000	397	-458	0.5130	5.3364
120.000	435	-498	0.5598	4.8234
122.000	467	-528	0.5970	4.2636
124.000	493	-553	0.6276	3.6666
126.000	524	-583	0.6642	3.0390
128.000	521	-584	0.6630	2.3748
130.000	470	-534	0.6024	1.7118
132.000	449	-511	0.5760	1.1094
134.000	415	-474	0.5334	0.5334

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

++ PREVIOUS -- ++ CURRENT --

DATA SET #		2
SENSOR #		27747B
DATE		08/22/97 13:43
READINGS PER DIRECTION		67
SENSOR:	27747B	

DEPTH	CURRENT DATA			CUM.DEV.
	B0	B180	INCR.DEV	
2.000	197	-286	0.2898	-21.7026
4.000	218	-310	0.3168	-21.9924
6.000	270	-366	0.3816	-22.3092
8.000	258	-344	0.3612	-22.6908
10.000	168	-259	0.2562	-23.0520
12.000	167	-264	0.2586	-23.3082
14.000	218	-308	0.3156	-23.5668
16.000	80	-174	0.1524	-23.8824
18.000	111	-203	0.1884	-24.0348
20.000	172	-271	0.2658	-24.2232
22.000	185	-282	0.2802	-24.4890
24.000	207	-302	0.3054	-24.7692
26.000	222	-315	0.3222	-25.0746
28.000	236	-334	0.3420	-25.3968
30.000	247	-342	0.3534	-25.7388
32.000	220	-311	0.3186	-26.0922
34.000	170	-270	0.2640	-26.4108
36.000	190	-287	0.2862	-26.6748
38.000	241	-341	0.3492	-26.9610
40.000	248	-347	0.3570	-27.3102
42.000	204	-302	0.3036	-27.6672
44.000	201	-296	0.2982	-27.9708
46.000	176	-272	0.2688	-28.2690
48.000	233	-333	0.3396	-28.5378
50.000	343	-439	0.4692	-28.8774
52.000	385	-487	0.5232	-29.3466
54.000	398	-494	0.5352	-29.8698
56.000	382	-477	0.5154	-30.4050
58.000	367	-460	0.4962	-30.9204
60.000	292	-391	0.4098	-31.4166
62.000	272	-370	0.3852	-31.8264
64.000	233	-326	0.3354	-32.2116
66.000	127	-219	0.2076	-32.5470
68.000	-6	-92	0.0516	-32.7546
70.000	-145	49	-0.1164	-32.8062
72.000	-206	109	-0.1890	-32.6898
74.000	-265	165	-0.2580	-32.5008
76.000	-316	215	-0.3186	-32.2428
78.000	-369	260	-0.3774	-31.9242
80.000	-373	277	-0.3900	-31.5468
82.000	-393	295	-0.4128	-31.1568
84.000	-436	340	-0.4656	-30.7440
86.000	-491	393	-0.5304	-30.2784

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

++ PREVIOUS --+ +- CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 13:43

READINGS PER DIRECTION

67

SENSOR: 27747B

=====+---- CURRENT DATA -----+

CUM. DEV.

DEPTH	B0	B180	INCR. DEV	IN.
88.000	-528	428	-0.5736	-29.7480
90.000	-547	454	-0.6006	-29.1744
92.000	-608	519	-0.6762	-28.5738
94.000	-706	621	-0.7962	-27.8976
96.000	-845	751	-0.9576	-27.1014
98.000	-968	867	-1.1010	-26.1438
100.000	-1099	1006	-1.2630	-25.0428
102.000	-1267	1169	-1.4616	-23.7798
104.000	-1367	1270	-1.5822	-22.3182
106.000	-1420	1326	-1.6476	-20.7360
108.000	-1378	1299	-1.6062	-19.0884
110.000	-1320	1219	-1.5234	-17.4822
112.000	-1249	1155	-1.4424	-15.9588
114.000	-1151	1053	-1.3224	-14.5164
116.000	-1119	1021	-1.2840	-13.1940
118.000	-1121	1032	-1.2918	-11.9100
120.000	-1137	1043	-1.3080	-10.6182
122.000	-1137	1041	-1.3068	-9.3102
124.000	-1158	1061	-1.3314	-8.0034
126.000	-1180	1080	-1.3560	-6.6720
128.000	-1180	1083	-1.3578	-5.3160
130.000	-1157	1065	-1.3332	-3.9582
132.000	-1143	1049	-1.3152	-2.6250
134.000	-1135	1048	-1.3098	-1.3098

=====+-----
END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997
SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

++ PREVIOUS ++ ++ CURRENT ++

DATA SET #		3
SENSOR #		27747B
DATE		08/22/97 14:10
READINGS PER DIRECTION		67
SENSOR:	27747B	

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
2.000	-213	147	-0.2160	5.1348
4.000	-82	26	-0.0648	5.3508
6.000	88	-147	0.1410	5.4156
8.000	40	-99	0.0834	5.2746
10.000	-72	14	-0.0516	5.1912
12.000	120	-182	0.1812	5.2428
14.000	135	-195	0.1980	5.0616
16.000	-104	45	-0.0894	4.8636
18.000	-178	119	-0.1782	4.9530
20.000	-149	89	-0.1428	5.1312
22.000	-180	121	-0.1806	5.2740
24.000	-194	134	-0.1968	5.4546
26.000	-183	125	-0.1848	5.6514
28.000	-122	62	-0.1104	5.8362
30.000	-121	61	-0.1092	5.9466
32.000	-102	44	-0.0876	6.0558
34.000	-81	21	-0.0612	6.1434
36.000	-95	34	-0.0774	6.2046
38.000	-73	13	-0.0516	6.2820
40.000	-9	-52	0.0258	6.3336
42.000	-31	-27	-0.0024	6.3078
44.000	-41	-19	-0.0132	6.3102
46.000	-55	-7	-0.0288	6.3234
48.000	-29	-29	0.0000	6.3522
50.000	107	-166	0.1638	6.3522
52.000	165	-222	0.2322	6.1884
54.000	185	-246	0.2586	5.9562
56.000	143	-201	0.2064	5.6976
58.000	171	-234	0.2430	5.4912
60.000	317	-373	0.4140	5.2482
62.000	278	-335	0.3678	4.8342
64.000	402	-458	0.5160	4.4664
66.000	500	-559	0.6354	3.9504
68.000	490	-547	0.6222	3.3150
70.000	539	-599	0.6828	2.6928
72.000	470	-529	0.5994	2.0100
74.000	317	-378	0.4170	1.4106
76.000	222	-283	0.3030	0.9936
78.000	78	-138	0.1296	0.6906
80.000	-65	5	-0.0420	0.5610
82.000	-121	62	-0.1098	0.6030
84.000	-242	182	-0.2544	0.7128
86.000	-337	277	-0.3684	0.9672

A

B

Mean
-69.5Std. Dev.
0.9Mean
-91.2Std. Dev.
7.0

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

3

27747B

08/22/97 14:10

67

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
88.000	-405	345	-0.4500	1.3356
90.000	-427	365	-0.4752	1.7856
92.000	-465	403	-0.5208	2.2608
94.000	-534	470	-0.6024	2.7816
96.000	-582	522	-0.6624	3.3840
98.000	-571	507	-0.6468	4.0464
100.000	-507	443	-0.5700	4.6932
102.000	-415	349	-0.4584	5.2632
104.000	-314	247	-0.3366	5.7216
106.000	-220	154	-0.2244	6.0582
108.000	-166	117	-0.1698	6.2826
110.000	-68	2	-0.0420	6.4524
112.000	142	-202	0.2064	6.4944
114.000	339	-403	0.4452	6.2880
116.000	377	-438	0.4890	5.8428
118.000	399	-460	0.5154	5.3538
120.000	435	-498	0.5598	4.8384
122.000	469	-530	0.5994	4.2786
124.000	493	-557	0.6300	3.6792
126.000	525	-587	0.6672	3.0492
128.000	525	-586	0.6666	2.3820
130.000	471	-535	0.6036	1.7154
132.000	450	-513	0.5778	1.1118
134.000	413	-477	0.5340	0.5340

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

++ PREVIOUS --+ +- CURRENT --+

DATA SET # 3
 SENSOR # 27747B
 DATE 08/22/97 14:10
 READINGS PER DIRECTION
 SENSOR: 27747B

DEPTH	B0	B180	INCR. DEV	CUM. DEV. IN.
2.000	195	-283	0.2868	-21.7032
4.000	215	-309	0.3144	-21.9900
6.000	270	-367	0.3822	-22.3044
8.000	255	-348	0.3618	-22.6866
10.000	164	-255	0.2514	-23.0484
12.000	167	-265	0.2592	-23.2998
14.000	217	-306	0.3138	-23.5590
16.000	81	-173	0.1524	-23.8728
18.000	111	-203	0.1884	-24.0252
20.000	175	-271	0.2676	-24.2136
22.000	185	-281	0.2796	-24.4812
24.000	209	-300	0.3054	-24.7608
26.000	219	-320	0.3234	-25.0662
28.000	237	-333	0.3420	-25.3896
30.000	246	-345	0.3546	-25.7316
32.000	221	-314	0.3210	-26.0862
34.000	170	-268	0.2628	-26.4072
36.000	191	-285	0.2856	-26.6700
38.000	243	-342	0.3510	-26.9556
40.000	251	-349	0.3600	-27.3066
42.000	203	-301	0.3024	-27.6666
44.000	201	-298	0.2994	-27.9690
46.000	174	-267	0.2646	-28.2684
48.000	231	-334	0.3390	-28.5330
50.000	346	-441	0.4722	-28.8720
52.000	385	-485	0.5220	-29.3442
54.000	398	-499	0.5382	-29.8662
56.000	380	-480	0.5160	-30.4044
58.000	364	-461	0.4950	-30.9204
60.000	291	-389	0.4080	-31.4154
62.000	274	-371	0.3870	-31.8234
64.000	233	-329	0.3372	-32.2104
66.000	126	-223	0.2094	-32.5476
68.000	-13	-90	0.0462	-32.7570
70.000	-146	49	-0.1170	-32.8032
72.000	-207	110	-0.1902	-32.6862
74.000	-265	166	-0.2586	-32.4960
76.000	-315	215	-0.3180	-32.2374
78.000	-368	257	-0.3750	-31.9194
80.000	-373	277	-0.3900	-31.5444
82.000	-398	297	-0.4170	-31.1544
84.000	-437	341	-0.4668	-30.7374
86.000	-492	394	-0.5316	-30.2706

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9605

site description Sta. 4+30, Offset 190' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 14:10

READINGS PER DIRECTION

67

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR.DEV	
88.000	-527	431	-0.5748	-29.7390
90.000	-547	450	-0.5982	-29.1642
92.000	-610	516	-0.6756	-28.5660
94.000	-709	622	-0.7986	-27.8904
96.000	-846	752	-0.9588	-27.0918
98.000	-967	869	-1.1016	-26.1330
100.000	-1097	1007	-1.2624	-25.0314
102.000	-1267	1170	-1.4622	-23.7690
104.000	-1366	1271	-1.5822	-22.3068
106.000	-1422	1326	-1.6488	-20.7246
108.000	-1381	1291	-1.6032	-19.0758
110.000	-1318	1222	-1.5240	-17.4726
112.000	-1246	1156	-1.4412	-15.9486
114.000	-1148	1053	-1.3206	-14.5074
116.000	-1117	1021	-1.2828	-13.1868
118.000	-1121	1029	-1.2900	-11.9040
120.000	-1139	1041	-1.3080	-10.6140
122.000	-1138	1040	-1.3068	-9.3060
124.000	-1157	1061	-1.3308	-7.9992
126.000	-1175	1079	-1.3524	-6.6684
128.000	-1177	1081	-1.3548	-5.3160
130.000	-1158	1061	-1.3314	-3.9612
132.000	-1147	1046	-1.3158	-2.6298
134.000	-1144	1046	-1.3140	-1.3140

=====

END OF RECORDS

INCLINOMETER IC-96-6

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS ++ ++ CURRENT ++

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 09:08

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
2.000	370	-426	0.4776	35.7432
4.000	382	-439	0.4926	35.2656
6.000	417	-471	0.5328	34.7730
8.000	359	-415	0.4644	34.2402
10.000	345	-401	0.4476	33.7758
12.000	342	-399	0.4446	33.3282
14.000	390	-447	0.5022	32.8836
16.000	359	-415	0.4644	32.3814
18.000	448	-506	0.5724	31.9170
20.000	439	-496	0.5610	31.3446
22.000	450	-506	0.5736	30.7836
24.000	416	-473	0.5334	30.2100
26.000	396	-451	0.5082	29.6766
28.000	381	-441	0.4932	29.1684
30.000	345	-403	0.4488	28.6752
32.000	347	-403	0.4500	28.2264
34.000	347	-404	0.4506	27.7764
36.000	347	-401	0.4488	27.3258
38.000	414	-471	0.5310	26.8770
40.000	456	-512	0.5808	26.3460
42.000	550	-607	0.6942	25.7652
44.000	579	-636	0.7290	25.0710
46.000	564	-618	0.7092	24.3420
48.000	598	-656	0.7524	23.6328
50.000	563	-620	0.7098	22.8804
52.000	518	-575	0.6558	22.1706
54.000	443	-502	0.5670	21.5148
56.000	379	-434	0.4878	20.9478
58.000	311	-369	0.4080	20.4600
60.000	238	-295	0.3198	20.0520
62.000	207	-265	0.2832	19.7322
64.000	201	-258	0.2754	19.4490
66.000	185	-244	0.2574	19.1736
68.000	178	-239	0.2502	18.9162
70.000	211	-269	0.2880	18.6660
72.000	334	-390	0.4344	18.3780
74.000	454	-516	0.5820	17.9436
76.000	555	-607	0.6972	17.3616
78.000	671	-726	0.8382	16.6644
80.000	736	-793	0.9174	15.8262
82.000	771	-817	0.9528	14.9088
84.000	814	-868	1.0092	13.9560
86.000	857	-910	1.0602	12.9468

A

Min
-86.0Std. Dev
2.6Mean
-94.0Std. Dev
4.6

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 09:08

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	A0	A180	INCR.DEV	CUM.DEV.
88.000	906	-961	1.1202	11.8866
90.000	921	-977	1.1388	10.7664
92.000	990	-1045	1.2210	9.6276
94.000	1089	-1143	1.3392	8.4066
96.000	1061	-1113	1.3044	7.0674
98.000	1169	-1224	1.4358	5.7630
100.000	1166	-1219	1.4310	4.3272
102.000	1179	-1229	1.4448	2.8962
104.000	1183	-1236	1.4514	1.4514

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS ++ ++ CURRENT ++

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 09:08

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV.
	B0	B180	INCR. DEV	IN.
2.000	-115	17	-0.0792	-27.6882
4.000	-131	35	-0.0996	-27.6090
6.000	-106	10	-0.0696	-27.5094
8.000	-88	6	-0.0564	-27.4398
10.000	35	-121	0.0936	-27.3834
12.000	112	-194	0.1836	-27.4770
14.000	-136	35	-0.1026	-27.6606
16.000	-184	91	-0.1650	-27.5580
18.000	-190	92	-0.1692	-27.3930
20.000	-219	125	-0.2064	-27.2238
22.000	-294	199	-0.2958	-27.0174
24.000	-343	249	-0.3552	-26.7216
26.000	-365	283	-0.3888	-26.3664
28.000	-391	292	-0.4098	-25.9776
30.000	-388	291	-0.4074	-25.5678
32.000	-387	291	-0.4068	-25.1604
34.000	-389	294	-0.4098	-24.7536
36.000	-391	303	-0.4164	-24.3438
38.000	-427	329	-0.4536	-23.9274
40.000	-481	386	-0.5202	-23.4738
42.000	-541	442	-0.5898	-22.9536
44.000	-551	457	-0.6048	-22.3638
46.000	-525	439	-0.5784	-21.7590
48.000	-533	434	-0.5802	-21.1806
50.000	-535	441	-0.5856	-20.6004
52.000	-566	469	-0.6210	-20.0148
54.000	-598	502	-0.6600	-19.3938
56.000	-615	522	-0.6822	-18.7338
58.000	-610	512	-0.6732	-18.0516
60.000	-618	526	-0.6864	-17.3784
62.000	-637	542	-0.7074	-16.6920
64.000	-677	581	-0.7548	-15.9846
66.000	-695	601	-0.7776	-15.2298
68.000	-740	642	-0.8292	-14.4522
70.000	-729	634	-0.8178	-13.6230
72.000	-721	626	-0.8082	-12.8052
74.000	-728	638	-0.8196	-11.9970
76.000	-721	623	-0.8064	-11.1774
78.000	-671	576	-0.7482	-10.3710
80.000	-645	546	-0.7146	-9.6228
82.000	-594	498	-0.6552	-8.9082
84.000	-550	453	-0.6018	-8.2530
86.000	-587	493	-0.6480	-7.6512

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS ++ ++ CURRENT ++

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 09:08

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
88.000	-567	474	-0.6246	-7.0032
90.000	-572	474	-0.6276	-6.3786
92.000	-601	504	-0.6630	-5.7510
94.000	-703	605	-0.7848	-5.0880
96.000	-740	646	-0.8316	-4.3032
98.000	-719	629	-0.8088	-3.4716
100.000	-742	653	-0.8370	-2.6628
102.000	-801	713	-0.9084	-1.8258
104.000	-808	721	-0.9174	-0.9174

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS --+ +-- CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 09:29

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
2.000	365	-426	0.4746	35.7156
4.000	379	-442	0.4926	35.2410
6.000	413	-474	0.5322	34.7484
8.000	355	-419	0.4644	34.2162
10.000	342	-405	0.4482	33.7518
12.000	338	-401	0.4434	33.3036
14.000	388	-450	0.5028	32.8602
16.000	357	-418	0.4650	32.3574
18.000	445	-508	0.5718	31.8924
20.000	436	-499	0.5610	31.3206
22.000	447	-510	0.5742	30.7596
24.000	413	-475	0.5328	30.1854
26.000	393	-454	0.5082	29.6526
28.000	379	-443	0.4932	29.1444
30.000	340	-406	0.4476	28.6512
32.000	343	-407	0.4500	28.2036
34.000	343	-407	0.4500	27.7536
36.000	343	-405	0.4488	27.3036
38.000	409	-475	0.5304	26.8548
40.000	452	-515	0.5802	26.3244
42.000	546	-611	0.6942	25.7442
44.000	575	-639	0.7284	25.0500
46.000	561	-622	0.7098	24.3216
48.000	593	-659	0.7512	23.6118
50.000	560	-622	0.7092	22.8606
52.000	514	-579	0.6558	22.1514
54.000	441	-505	0.5676	21.4956
56.000	375	-439	0.4884	20.9280
58.000	307	-374	0.4086	20.4396
60.000	234	-298	0.3192	20.0310
62.000	205	-267	0.2832	19.7118
64.000	198	-261	0.2754	19.4286
66.000	182	-246	0.2568	19.1532
68.000	174	-243	0.2502	18.8964
70.000	207	-273	0.2880	18.6462
72.000	331	-397	0.4368	18.3582
74.000	453	-517	0.5820	17.9214
76.000	548	-612	0.6960	17.3394
78.000	664	-730	0.8364	16.6434
80.000	730	-797	0.9162	15.8070
82.000	765	-830	0.9570	14.8908
84.000	807	-871	1.0068	13.9338
86.000	850	-913	1.0578	12.9270

A

B

Mean
-63.8Std. dev.
1.8

Mean

-97 -

Std. dev.

11 .

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS --+ +-- CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 09:29

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV.
	A0	A180	INCR. DEV	IN.
88.000	899	-964	1.1178	11.8692
90.000	914	-980	1.1364	10.7514
92.000	983	-1048	1.2186	9.6150
94.000	1083	-1147	1.3380	8.3964
96.000	1055	-1117	1.3032	7.0584
98.000	1162	-1226	1.4328	5.7552
100.000	1161	-1224	1.4310	4.3224
102.000	1173	-1234	1.4442	2.8914
104.000	1174	-1238	1.4472	1.4472

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 09:29

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	B0	B180	INCR.DEV	CUM.DEV. IN.
2.000	-111	21	-0.0792	-27.7188
4.000	-123	35	-0.0948	-27.6396
6.000	-105	15	-0.0720	-27.5448
8.000	-88	7	-0.0570	-27.4728
10.000	34	-120	0.0924	-27.4158
12.000	113	-193	0.1836	-27.5082
14.000	-132	34	-0.0996	-27.6918
16.000	-181	93	-0.1644	-27.5922
18.000	-189	94	-0.1698	-27.4278
20.000	-220	126	-0.2076	-27.2580
22.000	-296	201	-0.2982	-27.0504
24.000	-341	251	-0.3552	-26.7522
26.000	-369	284	-0.3918	-26.3970
28.000	-388	294	-0.4092	-26.0052
30.000	-386	293	-0.4074	-25.5960
32.000	-390	293	-0.4098	-25.1886
34.000	-391	296	-0.4122	-24.7788
36.000	-390	305	-0.4170	-24.3666
38.000	-426	330	-0.4536	-23.9496
40.000	-479	386	-0.5190	-23.4960
42.000	-538	443	-0.5886	-22.9770
44.000	-553	457	-0.6060	-22.3884
46.000	-525	441	-0.5796	-21.7824
48.000	-535	437	-0.5832	-21.2028
50.000	-535	443	-0.5868	-20.6196
52.000	-563	470	-0.6198	-20.0328
54.000	-597	504	-0.6606	-19.4130
56.000	-616	524	-0.6840	-18.7524
58.000	-613	515	-0.6768	-18.0684
60.000	-622	527	-0.6894	-17.3916
62.000	-638	544	-0.7092	-16.7022
64.000	-675	582	-0.7542	-15.9930
66.000	-693	602	-0.7770	-15.2388
68.000	-740	644	-0.8304	-14.4618
70.000	-730	636	-0.8196	-13.6314
72.000	-723	627	-0.8100	-12.8118
74.000	-729	640	-0.8214	-12.0018
76.000	-718	624	-0.8052	-11.1804
78.000	-669	575	-0.7464	-10.3752
80.000	-642	547	-0.7134	-9.6288
82.000	-592	497	-0.6534	-8.9154
84.000	-551	455	-0.6036	-8.2620
86.000	-589	495	-0.6504	-7.6584

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 09:29

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV.
	B0	B180	INCR.DEV	IN.
88.000	-569	474	-0.6258	-7.0080
90.000	-570	475	-0.6270	-6.3822
92.000	-596	506	-0.6612	-5.7552
94.000	-700	606	-0.7836	-5.0940
96.000	-743	648	-0.8346	-4.3104
98.000	-720	630	-0.8100	-3.4758
100.000	-745	654	-0.8394	-2.6658
102.000	-800	710	-0.9060	-1.8264
104.000	-813	721	-0.9204	-0.9204

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS --+ +-- CURRENT --+

DATA SET #

SENSOR #

DATE

READINGS PER DIRECTION

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
2.000	358	-426	0.4704	35.6916
4.000	378	-442	0.4920	35.2212
6.000	411	-473	0.5304	34.7292
8.000	355	-418	0.4638	34.1988
10.000	342	-404	0.4476	33.7350
12.000	338	-402	0.4440	33.2874
14.000	386	-449	0.5010	32.8434
16.000	355	-419	0.4644	32.3424
18.000	445	-509	0.5724	31.8780
20.000	436	-499	0.5610	31.3056
22.000	447	-510	0.5742	30.7446
24.000	411	-476	0.5322	30.1704
26.000	391	-454	0.5070	29.6382
28.000	379	-443	0.4932	29.1312
30.000	341	-406	0.4482	28.6380
32.000	343	-406	0.4494	28.1898
34.000	343	-407	0.4500	27.7404
36.000	343	-405	0.4488	27.2904
38.000	409	-476	0.5310	26.8416
40.000	451	-516	0.5802	26.3106
42.000	546	-611	0.6942	25.7304
44.000	575	-639	0.7284	25.0362
46.000	559	-622	0.7086	24.3078
48.000	593	-659	0.7512	23.5992
50.000	559	-624	0.7098	22.8480
52.000	513	-579	0.6552	22.1382
54.000	441	-505	0.5676	21.4830
56.000	375	-437	0.4872	20.9154
58.000	309	-373	0.4092	20.4282
60.000	234	-298	0.3192	20.0190
62.000	203	-268	0.2826	19.6998
64.000	195	-262	0.2742	19.4172
66.000	182	-246	0.2568	19.1430
68.000	175	-243	0.2508	18.8862
70.000	208	-271	0.2874	18.6354
72.000	330	-394	0.4344	18.3480
74.000	452	-515	0.5802	17.9136
76.000	548	-609	0.6942	17.3334
78.000	666	-730	0.8376	16.6392
80.000	730	-795	0.9150	15.8016
82.000	766	-829	0.9570	14.8866
84.000	807	-870	1.0062	13.9296
86.000	850	-913	1.0578	12.9234

A

B

Mean
-64.0Std. dev
1.0Mean
-97.3Std. dev
4.2

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS +- CURRENT +-

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 09:48

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR.DEV	
88.000	899	-965	1.1184	11.8656
90.000	914	-979	1.1358	10.7472
92.000	983	-1047	1.2180	9.6114
94.000	1085	-1146	1.3386	8.3934
96.000	1054	-1116	1.3020	7.0548
98.000	1161	-1226	1.4322	5.7528
100.000	1161	-1226	1.4322	4.3206
102.000	1170	-1234	1.4424	2.8884
104.000	1174	-1236	1.4460	1.4460

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

++ PREVIOUS --+ +- CURRENT --+

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 09:48

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
2.000	-117	14	-0.0786	-27.7350
4.000	-129	32	-0.0966	-27.6564
6.000	-108	14	-0.0732	-27.5598
8.000	-86	4	-0.0540	-27.4866
10.000	30	-121	0.0906	-27.4326
12.000	109	-194	0.1818	-27.5232
14.000	-137	30	-0.1002	-27.7050
16.000	-187	91	-0.1668	-27.6048
18.000	-189	91	-0.1680	-27.4380
20.000	-220	125	-0.2070	-27.2700
22.000	-297	198	-0.2970	-27.0630
24.000	-349	246	-0.3570	-26.7660
26.000	-378	281	-0.3954	-26.4090
28.000	-390	291	-0.4086	-26.0136
30.000	-387	292	-0.4074	-25.6050
32.000	-390	291	-0.4086	-25.1976
34.000	-391	294	-0.4110	-24.7890
36.000	-397	301	-0.4188	-24.3780
38.000	-430	327	-0.4542	-23.9592
40.000	-481	384	-0.5190	-23.5050
42.000	-539	442	-0.5886	-22.9860
44.000	-553	457	-0.6060	-22.3974
46.000	-531	438	-0.5814	-21.7914
48.000	-536	434	-0.5820	-21.2100
50.000	-539	439	-0.5868	-20.6280
52.000	-566	466	-0.6192	-20.0412
54.000	-599	502	-0.6606	-19.4220
56.000	-617	522	-0.6834	-18.7614
58.000	-613	513	-0.6756	-18.0780
60.000	-624	524	-0.6888	-17.4024
62.000	-642	539	-0.7086	-16.7136
64.000	-679	580	-0.7554	-16.0050
66.000	-695	600	-0.7770	-15.2496
68.000	-740	643	-0.8298	-14.4726
70.000	-732	633	-0.8190	-13.6428
72.000	-725	625	-0.8100	-12.8238
74.000	-734	637	-0.8226	-12.0138
76.000	-722	621	-0.8058	-11.1912
78.000	-671	576	-0.7482	-10.3854
80.000	-645	547	-0.7152	-9.6372
82.000	-592	495	-0.6522	-8.9220
84.000	-554	455	-0.6054	-8.2698
86.000	-593	491	-0.6504	-7.6644

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9606

site description Sta. 7+80, Offset 300' Downstream

+- PREVIOUS +- +- CURRENT +-

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 09:48

READINGS PER DIRECTION

52

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	B0	B180	INCR.DEV	
88.000	-573	473	-0.6276	-7.0140
90.000	-573	474	-0.6282	-6.3864
92.000	-599	507	-0.6636	-5.7582
94.000	-698	605	-0.7818	-5.0946
96.000	-743	645	-0.8328	-4.3128
98.000	-723	626	-0.8094	-3.4800
100.000	-750	654	-0.8424	-2.6706
102.000	-806	709	-0.9090	-1.8282
104.000	-811	721	-0.9192	-0.9192

END OF RECORDS

INCLINOMETER IC-96-7

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS --+ -- CURRENT --+

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 07:16

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV.
	A0	A180	INCR. DEV	IN.
2.000	38	-98	0.0816	-41.2842
4.000	27	-87	0.0684	-41.3658
6.000	18	-78	0.0576	-41.4342
8.000	-139	82	-0.1326	-41.4918
10.000	-279	222	-0.3006	-41.3592
12.000	-419	359	-0.4668	-41.0586
14.000	-525	464	-0.5934	-40.5918
16.000	-267	210	-0.2862	-39.9984
18.000	-139	80	-0.1314	-39.7122
20.000	-121	61	-0.1092	-39.5808
22.000	-188	129	-0.1902	-39.4716
24.000	-366	309	-0.4050	-39.2814
26.000	-328	268	-0.3576	-38.8764
28.000	-311	251	-0.3372	-38.5188
30.000	-246	186	-0.2592	-38.1816
32.000	-197	138	-0.2010	-37.9224
34.000	-186	128	-0.1884	-37.7214
36.000	-95	34	-0.0774	-37.5330
38.000	-126	65	-0.1146	-37.4556
40.000	-179	120	-0.1794	-37.3410
42.000	-189	131	-0.1920	-37.1616
44.000	-189	129	-0.1908	-36.9696
46.000	-216	157	-0.2238	-36.7788
48.000	-219	165	-0.2304	-36.5550
50.000	-169	111	-0.1680	-36.3246
52.000	-55	-3	-0.0312	-36.1566
54.000	-33	-27	-0.0036	-36.1254
56.000	-46	-14	-0.0192	-36.1218
58.000	-89	27	-0.0696	-36.1026
60.000	-149	90	-0.1434	-36.0330
62.000	-235	177	-0.2472	-35.8896
64.000	-323	266	-0.3534	-35.6424
66.000	-277	211	-0.2928	-35.2890
68.000	-267	206	-0.2838	-34.9962
70.000	-262	198	-0.2760	-34.7124
72.000	-262	200	-0.2772	-34.4364
74.000	-285	226	-0.3066	-34.1592
76.000	-258	186	-0.2664	-33.8526
78.000	-337	275	-0.3672	-33.5862
80.000	-402	341	-0.4458	-33.2190
82.000	-496	439	-0.5610	-32.7732
84.000	-614	543	-0.6942	-32.2122
86.000	-700	642	-0.8052	-31.5180

A

B

MeanStd Dev.

-59.9

3.0

MeanStd Dev.

5.?

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 07:16

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
88.000	-753	695	-0.8688	-30.7128
90.000	-754	687	-0.8646	-29.8440
92.000	-753	687	-0.8640	-28.9794
94.000	-696	635	-0.7986	-28.1154
96.000	-473	414	-0.5322	-27.3168
98.000	-487	426	-0.5478	-26.7846
100.000	-629	570	-0.7194	-26.2368
102.000	-753	693	-0.8676	-25.5174
104.000	-818	759	-0.9462	-24.6498
106.000	-813	753	-0.9396	-23.7036
108.000	-823	762	-0.9510	-22.7640
110.000	-805	743	-0.9288	-21.8130
112.000	-819	758	-0.9462	-20.8842
114.000	-823	767	-0.9540	-19.9380
116.000	-727	662	-0.8334	-18.9840
118.000	-695	631	-0.7956	-18.1506
120.000	-654	592	-0.7476	-17.3550
122.000	-616	555	-0.7026	-16.6074
124.000	-562	506	-0.6408	-15.9048
126.000	-431	370	-0.4806	-15.2640
128.000	-439	379	-0.4908	-14.7834
130.000	-429	369	-0.4788	-14.2926
132.000	-410	349	-0.4554	-13.8138
134.000	-403	343	-0.4476	-13.3584
136.000	-430	370	-0.4800	-12.9108
138.000	-559	498	-0.6342	-12.4308
140.000	-656	595	-0.7506	-11.7966
142.000	-788	727	-0.9090	-11.0460
144.000	-959	898	-1.1142	-10.1370
146.000	-877	813	-1.0140	-9.0228
148.000	-811	753	-0.9384	-8.0088
150.000	-795	737	-0.9192	-7.0704
152.000	-698	641	-0.8034	-6.1512
154.000	-603	545	-0.6888	-5.3478
156.000	-563	510	-0.6438	-4.6590
158.000	-515	458	-0.5838	-4.0152
160.000	-505	448	-0.5718	-3.4314
162.000	-474	419	-0.5358	-2.8596
164.000	-331	276	-0.3642	-2.3238
166.000	-194	135	-0.1974	-1.9596
168.000	-190	129	-0.1914	-1.7622
170.000	-239	178	-0.2502	-1.5708
172.000	-339	285	-0.3744	-1.3206

SLOPE INDICATOR DATA REDUCTION

----- PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS --+ +-- CURRENT --+

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 07:16

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV.
	A0	A180	INCR.DEV	IN.
174.000	-354	293	-0.3882	-0.9462
176.000	-199	137	-0.2016	-0.5580
178.000	-182	123	-0.1830	-0.3564
180.000	-129	70	-0.1194	-0.1734
182.000	-75	15	-0.0540	-0.0540

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS --+ +-- CURRENT --+

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 07:16

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	+--- CURRENT DATA ---+			CUM. DEV. IN.
	B0	B180	INCR. DEV	
2.000	-738	656	-0.8364	-78.2544
4.000	-703	613	-0.7896	-77.4180
6.000	-496	396	-0.5352	-76.6284
8.000	-382	299	-0.4086	-76.0932
10.000	-238	151	-0.2334	-75.6846
12.000	-226	136	-0.2172	-75.4512
14.000	-500	407	-0.5442	-75.2340
16.000	-661	567	-0.7368	-74.6898
18.000	-715	622	-0.8022	-73.9530
20.000	-746	655	-0.8406	-73.1508
22.000	-681	587	-0.7608	-72.3102
24.000	-575	480	-0.6330	-71.5494
26.000	-626	535	-0.6966	-70.9164
28.000	-673	580	-0.7518	-70.2198
30.000	-678	586	-0.7584	-69.4680
32.000	-686	593	-0.7674	-68.7096
34.000	-673	578	-0.7506	-67.9422
36.000	-743	649	-0.8352	-67.1916
38.000	-885	790	-1.0050	-66.3564
40.000	-973	888	-1.1166	-65.3514
42.000	-1046	956	-1.2012	-64.2348
44.000	-1052	965	-1.2102	-63.0336
46.000	-977	881	-1.1148	-61.8234
48.000	-950	856	-1.0836	-60.7086
50.000	-962	862	-1.0944	-59.6250
52.000	-949	859	-1.0848	-58.5306
54.000	-1051	959	-1.2060	-57.4458
56.000	-1134	1037	-1.3026	-56.2398
58.000	-1169	1073	-1.3452	-54.9372
60.000	-1203	1105	-1.3848	-53.5920
62.000	-1180	1080	-1.3560	-52.2072
64.000	-1123	1039	-1.2972	-50.8512
66.000	-1152	1055	-1.3242	-49.5540
68.000	-1135	1049	-1.3104	-48.2298
70.000	-1082	996	-1.2468	-46.9194
72.000	-1027	941	-1.1808	-45.6726
74.000	-955	878	-1.0998	-44.4918
76.000	-831	738	-0.9414	-43.3920
78.000	-731	644	-0.8250	-42.4506
80.000	-666	575	-0.7446	-41.6256
82.000	-667	592	-0.7554	-40.8810
84.000	-717	635	-0.8112	-40.1256
86.000	-755	660	-0.8490	-39.3144

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS ++ ++ CURRENT ++

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 07:16

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	B0	B180	INCR.DEV	CUM.DEV.
88.000	-844	746	-0.9540	-38.4654
90.000	-1245	1152	-1.4382	-37.5114
92.000	-1484	1411	-1.7370	-36.0732
94.000	-1266	1175	-1.4646	-34.3362
96.000	-875	774	-0.9894	-32.8716
98.000	-909	815	-1.0344	-31.8822
100.000	-913	817	-1.0380	-30.8478
102.000	-876	786	-0.9972	-29.8098
104.000	-804	718	-0.9132	-28.8126
106.000	-731	640	-0.8226	-27.8994
108.000	-746	655	-0.8406	-27.0768
110.000	-810	724	-0.9204	-26.2362
112.000	-859	769	-0.9768	-25.3158
114.000	-834	741	-0.9450	-24.3390
116.000	-843	751	-0.9564	-23.3940
118.000	-872	785	-0.9942	-22.4376
120.000	-883	794	-1.0062	-21.4434
122.000	-912	821	-1.0398	-20.4372
124.000	-898	817	-1.0290	-19.3974
126.000	-743	648	-0.8346	-18.3684
128.000	-650	555	-0.7230	-17.5338
130.000	-600	511	-0.6666	-16.8108
132.000	-530	441	-0.5826	-16.1442
134.000	-490	401	-0.5346	-15.5616
136.000	-458	363	-0.4926	-15.0270
138.000	-489	397	-0.5316	-14.5344
140.000	-565	474	-0.6234	-14.0028
142.000	-619	527	-0.6876	-13.3794
144.000	-684	604	-0.7728	-12.6918
146.000	-691	600	-0.7746	-11.9190
148.000	-670	577	-0.7482	-11.1444
150.000	-675	582	-0.7542	-10.3962
152.000	-739	644	-0.8298	-9.6420
154.000	-775	685	-0.8760	-8.8122
156.000	-730	642	-0.8232	-7.9362
158.000	-725	632	-0.8142	-7.1130
160.000	-760	667	-0.8562	-6.2988
162.000	-734	645	-0.8274	-5.4426
164.000	-610	525	-0.6810	-4.6152
166.000	-477	390	-0.5202	-3.9342
168.000	-422	333	-0.4530	-3.4140
170.000	-502	420	-0.5532	-2.9610
172.000	-287	189	-0.2856	-2.4078

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS --+ +- CURRENT --+

DATA SET #

1

SENSOR #

27747B

DATE

08/22/97 07:16

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
174.000	-277	183	-0.2760	-2.1222
176.000	-460	367	-0.4962	-1.8462
178.000	-447	358	-0.4830	-1.3500
180.000	-403	313	-0.4296	-0.8670
182.000	-407	322	-0.4374	-0.4374

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 07:50

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
2.000	37	-91	0.0768	-41.3160
4.000	25	-85	0.0660	-41.3928
6.000	19	-77	0.0576	-41.4588
8.000	-142	82	-0.1344	-41.5164
10.000	-278	220	-0.2988	-41.3820
12.000	-421	361	-0.4692	-41.0832
14.000	-525	463	-0.5928	-40.6140
16.000	-270	207	-0.2862	-40.0212
18.000	-139	78	-0.1302	-39.7350
20.000	-121	61	-0.1092	-39.6048
22.000	-189	128	-0.1902	-39.4956
24.000	-366	308	-0.4044	-39.3054
26.000	-329	269	-0.3588	-38.9010
28.000	-311	251	-0.3372	-38.5422
30.000	-246	184	-0.2580	-38.2050
32.000	-198	137	-0.2010	-37.9470
34.000	-186	127	-0.1878	-37.7460
36.000	-97	31	-0.0768	-37.5582
38.000	-126	66	-0.1152	-37.4814
40.000	-181	119	-0.1800	-37.3662
42.000	-191	130	-0.1926	-37.1862
44.000	-189	127	-0.1896	-36.9936
46.000	-214	157	-0.2226	-36.8040
48.000	-225	166	-0.2346	-36.5814
50.000	-171	112	-0.1698	-36.3468
52.000	-57	-3	-0.0324	-36.1770
54.000	-34	-27	-0.0042	-36.1446
56.000	-49	-14	-0.0210	-36.1404
58.000	-91	29	-0.0720	-36.1194
60.000	-155	90	-0.1470	-36.0474
62.000	-242	179	-0.2526	-35.9004
64.000	-327	267	-0.3564	-35.6478
66.000	-275	211	-0.2916	-35.2914
68.000	-267	205	-0.2832	-34.9998
70.000	-263	200	-0.2778	-34.7166
72.000	-262	202	-0.2784	-34.4388
74.000	-275	227	-0.3012	-34.1604
76.000	-258	197	-0.2730	-33.8592
78.000	-337	275	-0.3672	-33.5862
80.000	-401	339	-0.4440	-33.2190
82.000	-499	437	-0.5616	-32.7750
84.000	-611	551	-0.6972	-32.2134
86.000	-707	642	-0.8094	-31.5162

A

B

STD. Dev.
Mean

STD. Dev.

Z. S.

Mean

Std. Dev.

4.8

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 07:50

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
88.000	-754	694	-0.8688	-30.7068
90.000	-755	686	-0.8646	-29.8380
92.000	-755	687	-0.8652	-28.9734
94.000	-696	633	-0.7974	-28.1082
96.000	-477	415	-0.5352	-27.3108
98.000	-487	423	-0.5460	-26.7756
100.000	-627	569	-0.7176	-26.2296
102.000	-751	694	-0.8670	-25.5120
104.000	-818	760	-0.9468	-24.6450
106.000	-814	754	-0.9408	-23.6982
108.000	-825	762	-0.9522	-22.7574
110.000	-805	742	-0.9282	-21.8052
112.000	-820	757	-0.9462	-20.8770
114.000	-825	766	-0.9546	-19.9308
116.000	-726	662	-0.8328	-18.9762
118.000	-695	631	-0.7956	-18.1434
120.000	-655	591	-0.7476	-17.3478
122.000	-618	555	-0.7038	-16.6002
124.000	-563	503	-0.6396	-15.8964
126.000	-433	367	-0.4800	-15.2568
128.000	-439	378	-0.4902	-14.7768
130.000	-430	369	-0.4794	-14.2866
132.000	-411	349	-0.4560	-13.8072
134.000	-403	342	-0.4470	-13.3512
136.000	-431	371	-0.4812	-12.9042
138.000	-559	498	-0.6342	-12.4230
140.000	-656	595	-0.7506	-11.7888
142.000	-789	728	-0.9102	-11.0382
144.000	-959	897	-1.1136	-10.1280
146.000	-875	809	-1.0104	-9.0144
148.000	-810	753	-0.9378	-8.0040
150.000	-796	735	-0.9186	-7.0662
152.000	-700	640	-0.8040	-6.1476
154.000	-605	545	-0.6900	-5.3436
156.000	-566	507	-0.6438	-4.6536
158.000	-516	455	-0.5826	-4.0098
160.000	-509	450	-0.5754	-3.4272
162.000	-475	418	-0.5358	-2.8518
164.000	-333	275	-0.3648	-2.3160
166.000	-191	132	-0.1938	-1.9512
168.000	-191	128	-0.1914	-1.7574
170.000	-243	180	-0.2538	-1.5660
172.000	-340	284	-0.3744	-1.3122

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS --+ ++ CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 07:50

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
174.000	-350	289	-0.3834	-0.9378
176.000	-198	136	-0.2004	-0.5544
178.000	-182	122	-0.1824	-0.3540
180.000	-127	67	-0.1164	-0.1716
182.000	-77	15	-0.0552	-0.0552

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

+- PREVIOUS -+ +- CURRENT -+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 07:50

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	B0	B180	INCR.DEV	CUM. DEV.
2.000	-745	655	-0.8400	-78.1566
4.000	-696	611	-0.7842	-77.3166
6.000	-496	394	-0.5340	-76.5324
8.000	-383	300	-0.4098	-75.9984
10.000	-237	151	-0.2328	-75.5886
12.000	-227	139	-0.2196	-75.3558
14.000	-498	407	-0.5430	-75.1362
16.000	-659	567	-0.7356	-74.5932
18.000	-717	622	-0.8034	-73.8576
20.000	-748	654	-0.8412	-73.0542
22.000	-682	588	-0.7620	-72.2130
24.000	-575	481	-0.6336	-71.4510
26.000	-624	535	-0.6954	-70.8174
28.000	-674	581	-0.7530	-70.1220
30.000	-679	585	-0.7584	-69.3690
32.000	-687	591	-0.7668	-68.6106
34.000	-673	578	-0.7506	-67.8438
36.000	-736	649	-0.8310	-67.0932
38.000	-882	793	-1.0050	-66.2622
40.000	-978	887	-1.1190	-65.2572
42.000	-1049	954	-1.2018	-64.1382
44.000	-1050	962	-1.2072	-62.9364
46.000	-973	879	-1.1112	-61.7292
48.000	-948	855	-1.0818	-60.6180
50.000	-954	864	-1.0908	-59.5362
52.000	-946	857	-1.0818	-58.4454
54.000	-1046	955	-1.2006	-57.3636
56.000	-1130	1033	-1.2978	-56.1630
58.000	-1164	1070	-1.3404	-54.8652
60.000	-1198	1103	-1.3806	-53.5248
62.000	-1174	1082	-1.3536	-52.1442
64.000	-1125	1039	-1.2984	-50.7906
66.000	-1153	1055	-1.3248	-49.4922
68.000	-1139	1049	-1.3128	-48.1674
70.000	-1088	993	-1.2486	-46.8546
72.000	-1030	939	-1.1814	-45.6060
74.000	-956	875	-1.0986	-44.4246
76.000	-826	741	-0.9402	-43.3260
78.000	-732	645	-0.8262	-42.3858
80.000	-667	573	-0.7440	-41.5596
82.000	-665	570	-0.7410	-40.8156
84.000	-714	624	-0.8028	-40.0746
86.000	-748	659	-0.8442	-39.2718

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS --+ +-- CURRENT --+

DATA SET #

2

SENSOR #

27747B

DATE

08/22/97 07:50

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV.
	B0	B180	INCR. DEV	IN.
88.000	-840	745	-0.9510	-38.4276
90.000	-1238	1151	-1.4334	-37.4766
92.000	-1483	1411	-1.7364	-36.0432
94.000	-1269	1175	-1.4664	-34.3068
96.000	-877	776	-0.9918	-32.8404
98.000	-905	814	-1.0314	-31.8486
100.000	-908	821	-1.0374	-30.8172
102.000	-873	786	-0.9954	-29.7798
104.000	-803	715	-0.9108	-28.7844
106.000	-734	637	-0.8226	-27.8736
108.000	-746	655	-0.8406	-27.0510
110.000	-812	723	-0.9210	-26.2104
112.000	-857	769	-0.9756	-25.2894
114.000	-831	746	-0.9462	-24.3138
116.000	-842	749	-0.9546	-23.3676
118.000	-873	782	-0.9930	-22.4130
120.000	-886	793	-1.0074	-21.4200
122.000	-911	823	-1.0404	-20.4126
124.000	-895	819	-1.0284	-19.3722
126.000	-741	646	-0.8322	-18.3438
128.000	-647	557	-0.7224	-17.5116
130.000	-600	510	-0.6660	-16.7892
132.000	-532	440	-0.5832	-16.1232
134.000	-490	401	-0.5346	-15.5400
136.000	-456	365	-0.4926	-15.0054
138.000	-485	398	-0.5298	-14.5128
140.000	-562	473	-0.6210	-13.9830
142.000	-619	529	-0.6888	-13.3620
144.000	-693	602	-0.7770	-12.6732
146.000	-694	602	-0.7776	-11.8962
148.000	-667	576	-0.7458	-11.1186
150.000	-671	583	-0.7524	-10.3728
152.000	-736	645	-0.8286	-9.6204
154.000	-765	685	-0.8700	-8.7918
156.000	-735	638	-0.8238	-7.9218
158.000	-725	631	-0.8136	-7.0980
160.000	-760	669	-0.8574	-6.2844
162.000	-729	646	-0.8250	-5.4270
164.000	-606	523	-0.6774	-4.6020
166.000	-477	388	-0.5190	-3.9246
168.000	-423	330	-0.4518	-3.4056
170.000	-504	422	-0.5556	-2.9538
172.000	-283	185	-0.2808	-2.3982

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

	-- PREVIOUS --	-- CURRENT --
DATA SET #		2
SENSOR #		27747B
DATE		08/22/97 07:50
READINGS PER DIRECTION		91
SENSOR:	27747B	

DEPTH	CURRENT DATA			CUM.DEV.
	B0	B180	INCR.DEV	IN.
174.000	-277	185	-0.2772	-2.1174
176.000	-460	369	-0.4974	-1.8402
178.000	-446	357	-0.4818	-1.3428
180.000	-401	307	-0.4248	-0.8610
182.000	-409	318	-0.4362	-0.4362

END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS ++ ++ CURRENT ++

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 08:25

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
2.000	25	-92	0.0702	-41.3286
4.000	25	-86	0.0666	-41.3988
6.000	18	-78	0.0576	-41.4654
8.000	-141	83	-0.1344	-41.5230
10.000	-279	220	-0.2994	-41.3886
12.000	-419	359	-0.4668	-41.0892
14.000	-523	463	-0.5916	-40.6224
16.000	-268	206	-0.2844	-40.0308
18.000	-139	78	-0.1302	-39.7464
20.000	-122	60	-0.1092	-39.6162
22.000	-190	128	-0.1908	-39.5070
24.000	-367	307	-0.4044	-39.3162
26.000	-329	267	-0.3576	-38.9118
28.000	-311	250	-0.3366	-38.5542
30.000	-245	185	-0.2580	-38.2176
32.000	-197	137	-0.2004	-37.9596
34.000	-186	128	-0.1884	-37.7592
36.000	-95	30	-0.0756	-37.5708
38.000	-127	65	-0.1152	-37.4952
40.000	-180	119	-0.1794	-37.3800
42.000	-190	128	-0.1908	-37.2006
44.000	-188	127	-0.1890	-37.0098
46.000	-216	158	-0.2244	-36.8208
48.000	-225	165	-0.2340	-36.5964
50.000	-171	111	-0.1692	-36.3624
52.000	-57	-5	-0.0312	-36.1932
54.000	-34	-29	-0.0030	-36.1620
56.000	-48	-15	-0.0198	-36.1590
58.000	-91	29	-0.0720	-36.1392
60.000	-155	91	-0.1476	-36.0672
62.000	-242	180	-0.2532	-35.9196
64.000	-326	266	-0.3552	-35.6664
66.000	-274	209	-0.2898	-35.3112
68.000	-267	203	-0.2820	-35.0214
70.000	-265	201	-0.2796	-34.7394
72.000	-265	202	-0.2802	-34.4598
74.000	-285	224	-0.3054	-34.1796
76.000	-258	194	-0.2712	-33.8742
78.000	-339	278	-0.3702	-33.6030
80.000	-401	339	-0.4440	-33.2328
82.000	-498	438	-0.5616	-32.7888
84.000	-612	550	-0.6972	-32.2272
86.000	-707	643	-0.8100	-31.5300

A

Mean
-61.3Std dev
2.7Mean
-73.3Std dev
5.0

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS ++ ++ CURRENT ++

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 08:25

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	A0	A180	INCR. DEV	
88.000	-754	695	-0.8694	-30.7200
90.000	-755	689	-0.8664	-29.8506
92.000	-755	687	-0.8652	-28.9842
94.000	-696	633	-0.7974	-28.1190
96.000	-478	415	-0.5358	-27.3216
98.000	-485	423	-0.5448	-26.7858
100.000	-629	567	-0.7176	-26.2410
102.000	-753	694	-0.8682	-25.5234
104.000	-819	760	-0.9474	-24.6552
106.000	-815	755	-0.9420	-23.7078
108.000	-824	764	-0.9528	-22.7658
110.000	-803	742	-0.9270	-21.8130
112.000	-819	758	-0.9462	-20.8860
114.000	-826	768	-0.9564	-19.9398
116.000	-729	662	-0.8346	-18.9834
118.000	-695	631	-0.7956	-18.1488
120.000	-655	592	-0.7482	-17.3532
122.000	-617	555	-0.7032	-16.6050
124.000	-563	505	-0.6408	-15.9018
126.000	-432	368	-0.4800	-15.2610
128.000	-440	375	-0.4890	-14.7810
130.000	-431	368	-0.4794	-14.2920
132.000	-410	348	-0.4548	-13.8126
134.000	-403	342	-0.4470	-13.3578
136.000	-432	370	-0.4812	-12.9108
138.000	-562	498	-0.6360	-12.4296
140.000	-657	593	-0.7500	-11.7936
142.000	-789	729	-0.9108	-11.0436
144.000	-959	897	-1.1136	-10.1328
146.000	-874	811	-1.0110	-9.0192
148.000	-811	751	-0.9372	-8.0082
150.000	-795	734	-0.9174	-7.0710
152.000	-702	641	-0.8058	-6.1536
154.000	-606	546	-0.6912	-5.3478
156.000	-565	507	-0.6432	-4.6566
158.000	-515	456	-0.5826	-4.0134
160.000	-510	450	-0.5760	-3.4308
162.000	-477	418	-0.5370	-2.8548
164.000	-334	275	-0.3654	-2.3178
166.000	-191	132	-0.1938	-1.9524
168.000	-190	129	-0.1914	-1.7586
170.000	-246	182	-0.2568	-1.5672
172.000	-339	282	-0.3726	-1.3104

SLOPE INDICATOR DATA REDUCTION

----- PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS ++ ++ CURRENT ++

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 08:25

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM.DEV. IN.
	A0	A180	INCR.DEV	
174.000	-349	289	-0.3828	-0.9378
176.000	-198	135	-0.1998	-0.5550
178.000	-183	122	-0.1830	-0.3552
180.000	-128	67	-0.1170	-0.1722
182.000	-77	15	-0.0552	-0.0552

=====
END OF RECORDS

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS ++ CURRENT +-

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 08:25

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
2.000	-739	651	-0.8340	-78.2124
4.000	-697	609	-0.7836	-77.3784
6.000	-494	396	-0.5340	-76.5948
8.000	-386	302	-0.4128	-76.0608
10.000	-238	152	-0.2340	-75.6480
12.000	-230	138	-0.2208	-75.4140
14.000	-501	406	-0.5442	-75.1932
16.000	-660	563	-0.7338	-74.6490
18.000	-715	622	-0.8022	-73.9152
20.000	-746	656	-0.8412	-73.1130
22.000	-683	589	-0.7632	-72.2718
24.000	-576	480	-0.6336	-71.5086
26.000	-625	533	-0.6948	-70.8750
28.000	-674	579	-0.7518	-70.1802
30.000	-677	585	-0.7572	-69.4284
32.000	-685	593	-0.7668	-68.6712
34.000	-673	580	-0.7518	-67.9044
36.000	-742	650	-0.8352	-67.1526
38.000	-885	789	-1.0044	-66.3174
40.000	-978	884	-1.1172	-65.3130
42.000	-1048	953	-1.2006	-64.1958
44.000	-1052	964	-1.2096	-62.9952
46.000	-973	879	-1.1112	-61.7856
48.000	-951	854	-1.0830	-60.6744
50.000	-957	861	-1.0908	-59.5914
52.000	-950	855	-1.0830	-58.5006
54.000	-1047	954	-1.2006	-57.4176
56.000	-1130	1033	-1.2978	-56.2170
58.000	-1165	1071	-1.3416	-54.9192
60.000	-1199	1103	-1.3812	-53.5776
62.000	-1178	1080	-1.3548	-52.1964
64.000	-1125	1037	-1.2972	-50.8416
66.000	-1157	1053	-1.3260	-49.5444
68.000	-1138	1050	-1.3128	-48.2184
70.000	-1089	994	-1.2498	-46.9056
72.000	-1033	942	-1.1850	-45.6558
74.000	-959	879	-1.1028	-44.4708
76.000	-830	735	-0.9390	-43.3680
78.000	-733	638	-0.8226	-42.4290
80.000	-667	573	-0.7440	-41.6064
82.000	-663	569	-0.7392	-40.8624
84.000	-716	624	-0.8040	-40.1232
86.000	-753	656	-0.8454	-39.3192

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997
 SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS ++ ++ CURRENT ++

DATA SET #
 SENSOR #
 DATE
 READINGS PER DIRECTION
 SENSOR: 27747B

3
 27747B
 08/22/97 08:25
 91

DEPTH	B0	B180	INCR. DEV	CUM. DEV.
88.000	-847	743	-0.9540	-38.4738
90.000	-1244	1145	-1.4334	-37.5198
92.000	-1489	1411	-1.7400	-36.0864
94.000	-1271	1183	-1.4724	-34.3464
96.000	-878	775	-0.9918	-32.8740
98.000	-907	813	-1.0320	-31.8822
100.000	-915	818	-1.0398	-30.8502
102.000	-879	782	-0.9966	-29.8104
104.000	-807	713	-0.9120	-28.8138
106.000	-734	634	-0.8208	-27.9018
108.000	-747	655	-0.8412	-27.0810
110.000	-815	723	-0.9228	-26.2398
112.000	-863	766	-0.9774	-25.3170
114.000	-834	743	-0.9462	-24.3396
116.000	-845	746	-0.9546	-23.3934
118.000	-873	781	-0.9924	-22.4388
120.000	-883	791	-1.0044	-21.4464
122.000	-914	822	-1.0416	-20.4420
124.000	-899	819	-1.0308	-19.4004
126.000	-743	643	-0.8316	-18.3696
128.000	-651	560	-0.7266	-17.5380
130.000	-602	510	-0.6672	-16.8114
132.000	-532	441	-0.5838	-16.1442
134.000	-490	399	-0.5334	-15.5604
136.000	-459	362	-0.4926	-15.0270
138.000	-494	397	-0.5346	-14.5344
140.000	-565	473	-0.6228	-13.9998
142.000	-618	522	-0.6840	-13.3770
144.000	-687	602	-0.7734	-12.6930
146.000	-698	600	-0.7788	-11.9196
148.000	-670	574	-0.7464	-11.1408
150.000	-675	581	-0.7536	-10.3944
152.000	-741	643	-0.8304	-9.6408
154.000	-778	684	-0.8772	-8.8104
156.000	-735	637	-0.8232	-7.9332
158.000	-725	630	-0.8130	-7.1100
160.000	-763	669	-0.8592	-6.2970
162.000	-736	644	-0.8280	-5.4378
164.000	-609	521	-0.6780	-4.6098
166.000	-478	389	-0.5202	-3.9318
168.000	-423	328	-0.4506	-3.4116
170.000	-510	424	-0.5604	-2.9610
172.000	-290	191	-0.2886	-2.4006

SLOPE INDICATOR DATA REDUCTION

PAGE 1

Printed by DMM on August 25, 1997

SITE: BMTDAM HOLE NUMBER IC9607

site description Sta. 6+00, Offset 300' Downstream

++ PREVIOUS --+ +- CURRENT --+

DATA SET #

3

SENSOR #

27747B

DATE

08/22/97 08:25

READINGS PER DIRECTION

91

SENSOR: 27747B

DEPTH	CURRENT DATA			CUM. DEV. IN.
	B0	B180	INCR. DEV	
174.000	-279	182	-0.2766	-2.1120
176.000	-465	367	-0.4992	-1.8354
178.000	-448	356	-0.4824	-1.3362
180.000	-400	305	-0.4230	-0.8538
182.000	-397	321	-0.4308	-0.4308

END OF RECORDS

APPENDIX C

Tabular Printouts of Spiral Readings

C.1 Field Spiral Data

C.2 Processed and Expanded Spiral Data

Appendix C.1

Spiral Field Data

QUESTIONS

IC9601.DAT

BMTDAM = DATA FILE NAME

Sta. 8+50, O = PROJECT NO

IC9601

032-5 = HOLE NO.

0, = READING SET NO.

.000, = DATE

.000, = TIME

0., 10., = STATISTICS INTERVAL
DS = INSTRUMEN NO.

0, = HALF OR COMPLETE SET OF DATA

0, = A-ROTATION ERROR CORRECTIO

0, = B-ROTATION ERROR CORRECTIO

400., = INSTRUMENT CONSTANT

2., = A+ COMPASS DIRECTION

= A- COMPASS DIRECTION

= B+ COMPASS DIRECTION

= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONEN SHIFT

0, = B COMPONEN SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS , 31

Depth	A+	A-	B+	B-
2.000,	-66,	0,	-43,	-19
7.000,	0,	98,	29,	50
12.000,	12,	75,	29,	38
17.000,	80,	83,	81,	92
22.000,	6,	47,	-2,	82
27.000,	103,	-21,	38,	9
32.000,	33,	-45,	-5,	2
37.000,	-13,	21,	-2,	-3
42.000,	-56,	9,	-19,	-24
47.000,	-37,	40,	-1,	-12
52.000,	-86,	5,	-42,	-3
57.000,	-33,	-15,	-55,	-15
62.000,	-35,	-43,	-61,	-44
67.000,	-89,	-33,	-11,	-82
72.000,	-38,	-21,	-58,	-34
77.000,	-43,	-39,	-35,	-27
82.000,	-53,	-32,	-46,	-53
87.000,	-57,	-32,	-40,	-33
92.000,	3,	-68,	-43,	-34
97.000,	-51,	-49,	-66,	-23

102.000,	-37,	-38,	-35,	-30
107.000,	-90,	38,	-6,	-60
112.000,	-61,	-31,	-50,	-41
117.000,	-26,	7,	20,	-39
122.000,	-62,	-9,	-37,	-47
127.000,	-45,	-25,	-41,	-23
132.000,	-59,	-11,	-75,	-7
137.000,	-32,	-67,	-58,	-31
142.000,	-44,	-40,	-86,	-15
147.000,	-71,	-22,	-90,	9
152.000,	-47,	-21,	-31,	-62

QUESTIONS

IC9602.DA = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 6+00, Offset 75' Downstream

IC9602 = HOLE NO.

4 = READING SET NO.

08/23/97 = DATE

12:21 = TIME

032-5 = STATISTICS INTERVAL
= INSTRUMENT NO.

0, = HALF OR COMPLETE SET OF DATA

.000, = A-ROTATION ERROR CORRECTION

.000, = B-ROTATION ERROR CORRECTION

0., = INSTRUMENT CONSTANT

Downstrea = A+ COMPASS DIRECTION
= A- COMPASS DIRECTION
= B+ COMPASS DIRECTION
= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONENT SHIFT

0, = B COMPONENT SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS, 51

Depth	A+	A-	B+	B-
2.000,	-28,	-19,	-17,	-61
7.000,	-61,	-10,	2,	-56
12.000,	-49,	-12,	-60,	-27
17.000,	-24,	-38,	-10,	-31
22.000,	-48,	-30,	-44,	-59
27.000,	-59,	-9,	-27,	-13
32.000,	-87,	6,	-82,	-35
37.000,	-70,	-18,	-53,	-5
42.000,	-39,	-45,	-78,	-21
47.000,	-28,	-40,	-53,	-7
52.000,	-6,	-66,	-67,	-33
57.000,	-21,	-53,	-39,	-14
62.000,	-6,	-45,	-41,	-41
67.000,	-37,	-30,	-3,	-36
72.000,	-26,	8,	-13,	-42
77.000,	-65,	-13,	-23,	-30
82.000,	-35,	-35,	-54,	-46
87.000,	-48,	-33,	-49,	-5
92.000,	-22,	-53,	-85,	-22
97.000,	-31,	-57,	-65,	-13
102.000,	-5,	-47,	-81,	6

107.000,	-46,	-30,	-42,	-1
112.000,	-47,	-28,	-54,	-55
117.000,	-55,	-19,	10,	-71
122.000,	-44,	-19,	-6,	-91
127.000,	-69,	-15,	-9,	-28
132.000,	-30,	18,	-39,	-3
137.000,	-41,	-30,	-70,	27
142.000,	38,	-61,	-68,	18
147.000,	5,	-62,	-41,	5
152.000,	10,	-17,	28,	-75
157.000,	-67,	-1,	38,	-72
162.000,	-15,	-25,	-59,	-25
167.000,	-35,	-61,	-41,	-55
172.000,	-58,	-17,	-22,	-42
177.000,	-53,	-4,	5,	-50
182.000,	17,	5,	3,	-20
187.000,	-18,	-65,	-37,	-26
192.000,	-19,	-29,	-67,	-3
197.000,	-91,	45,	-35,	15
202.000,	91,	-79,	45,	-67
207.000,	-49,	-27,	-59,	-26
212.000,	-15,	26,	-18,	19
217.000,	9,	-66,	-62,	21
222.000,	-12,	3,	25,	-71
227.000,	-27,	-4,	44,	-42
232.000,	-9,	-6,	-19,	-14
237.000,	-55,	-10,	-37,	-6
242.000,	-5,	-24,	-86,	13
247.000,	-33,	2,	-94,	86
252.000,	-35,	8,	-62,	17

QUESTIONS

IC9603.DA = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 3+50, Offset 75'Downstream

IC9603 = HOLE NO.

5 = READING SET NO.

08/23/97 = DATE

11:37 = TIME

10., = STATISTICS INTERVAL
032-5 = INSTRUMENT NO.

0, = HALF OR COMPLETE SET OF DATA

.000, = A-ROTATION ERROR CORRECTION

.000, = B-ROTATION ERROR CORRECTION

0., = INSTRUMENT CONSTANT

Downstrea = A+ COMPASS DIRECTION

= A- COMPASS DIRECTION

= B+ COMPASS DIRECTION

= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONENT SHIFT

0, = B COMPONENT SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS, 27

Depth	A+	A-	B+	B-
2.000,	-5,	-58,	-37,	-22
7.000,	-25,	-38,	-46,	-20
12.000,	-32,	-26,	-6,	-51
17.000,	17,	-42,	-53,	26
22.000,	-14,	-58,	-70,	2
27.000,	-30,	-10,	-37,	-25
32.000,	-72,	7,	-38,	-31
37.000,	-71,	54,	-13,	5
42.000,	-29,	-58,	-37,	-51
47.000,	10,	-38,	46,	-59
52.000,	-26,	-58,	-33,	-55
57.000,	-22,	12,	-10,	6
62.000,	-59,	-13,	-58,	-19
67.000,	-74,	10,	-39,	-25
72.000,	-42,	-33,	-21,	-54
77.000,	-29,	-9,	2,	-39
82.000,	-38,	-50,	-27,	-66
87.000,	-29,	29,	11,	9
92.000,	-41,	-21,	-50,	-24
97.000,	-16,	3,	-19,	-10
102.000,	-7,	-50,	-10,	-47

107.000,	-51,	-11,	-13,	-38
112.000,	-9,	-38,	-18,	-38
117.000,	-53,	2,	-49,	22
122.000,	-90,	21,	-62,	-16
127.000,	-66,	16,	-50,	-17
132.000,	-59,	6,	-15,	-38

QUESTIONS

IC9604.DA = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 7+80, Offset 190' Downstream

IC9604 = HOLE NO.

4 = READING SET NO.

08/23/97 = DATE

08:53 = TIME

10., = STATISTICS INTERVAL
032-5 = INSTRUMENT NO.

0, = HALF OR COMPLETE SET OF DATA

.000, = A-ROTATION ERROR CORRECTION

.000, = B-ROTATION ERROR CORRECTION

0., = INSTRUMENT CONSTANT

Downstrea = A+ COMPASS DIRECTION

= A- COMPASS DIRECTION

= B+ COMPASS DIRECTION

= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONENT SHIFT

0, = B COMPONENT SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS, 29

Depth	A+	A-	B+	B-
2.000,	-117,	55,	19,	-86
7.000,	-59,	44,	140,	-119
12.000,	25,	-107,	-85,	1
17.000,	5,	18,	-9,	26
22.000,	-44,	-38,	-43,	-35
27.000,	29,	-43,	34,	-54
32.000,	-85,	-6,	-10,	-77
37.000,	-79,	46,	-77,	31
42.000,	-61,	-20,	-46,	-43
47.000,	26,	-64,	-27,	-1
52.000,	-32,	-55,	-57,	-21
57.000,	17,	-13,	-7,	1
62.000,	-43,	-17,	-9,	-33
67.000,	0,	-26,	-23,	-15
72.000,	-13,	-70,	-70,	-22
77.000,	1,	-52,	-10,	-29
82.000,	-23,	-46,	-1,	-62
87.000,	-59,	0,	11,	-81
92.000,	-72,	-11,	-18,	-45
97.000,	-9,	-45,	-23,	-44
102.000,	-63,	-40,	-71,	-22
107.000,	-28,	-73,	-59,	-57

112.000,	-32,	-83,	-45,	-55
117.000,	-9,	-18,	-23,	-14
122.000,	-40,	-30,	-93,	25
127.000,	-10,	-10,	-45,	6
132.000,	-30,	-38,	-22,	-59
137.000,	-12,	-33,	13,	-45
142.000,	-87,	6,	-54,	-13

QUESTIONS

IC9605.DA = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 4+30, Offset 190' Downstream

IC9605 = HOLE NO.

4 = READING SET NO.

08/23/97 = DATE

10:55 = TIME

10., = STATISTICS INTERVAL
032-5 = INSTRUMENT NO.

0, = HALF OR COMPLETE SET OF DATA

.000, = A-ROTATION ERROR CORRECTION

.000, = B-ROTATION ERROR CORRECTION

0., = INSTRUMENT CONSTANT

Downstrea = A+ COMPASS DIRECTION

= A- COMPASS DIRECTION

= B+ COMPASS DIRECTION

= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONENT SHIFT

0, = B COMPONENT SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS, 27

Depth	A+	A-	B+	B-
2.000,	-13,	-36,	-89,	45
7.000,	-24,	26,	-2,	-46
12.000,	3,	8,	22,	-12
17.000,	31,	3,	32,	22
22.000,	29,	14,	25,	32
27.000,	7,	5,	-1,	10
32.000,	-27,	-17,	-23,	-17
37.000,	-42,	-45,	-57,	-34
42.000,	-38,	-31,	-27,	-36
47.000,	-35,	-97,	-103,	-34
52.000,	-39,	-23,	-31,	-35
57.000,	-57,	-19,	-74,	-26
62.000,	-69,	-5,	-72,	-9
67.000,	-56,	26,	-11,	-21
72.000,	-51,	-11,	18,	-78
77.000,	2,	23,	62,	-37
82.000,	-50,	-20,	5,	-74
87.000,	-10,	20,	13,	-14
92.000,	-79,	10,	-21,	-58
97.000,	-67,	39,	-39,	6
102.000,	-68,	-14,	-80,	-1

107.000,	2,	-47,	-63,	26
112.000,	-14,	-66,	-94,	17
117.000,	-8,	2,	-18,	5
122.000,	-35,	-22,	-40,	-20
127.000,	-1,	-7,	6,	-26
132.000,	-39,	-21,	-13,	-35

QUESTIONS

IC9606.DA = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 7+80, Offset 300' Downstream

IC9606 = HOLE NO.

4 = READING SET NO.

08/23/97 = DATE

09:33 = TIME

032-5 10., = STATISTICS INTERVAL
= INSTRUMENT NO.

0, = HALF OR COMPLETE SET OF DATA

.000, = A-ROTATION ERROR CORRECTION

.000, = B-ROTATION ERROR CORRECTION

0., = INSTRUMENT CONSTANT

Downstrea = A+ COMPASS DIRECTION

= A- COMPASS DIRECTION

= B+ COMPASS DIRECTION

= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONENT SHIFT

0, = B COMPONENT SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS, 21

Depth	A+	A-	B+	B-
2.000,	-30,	-27,	-49,	-1
7.000,	-10,	-70,	-38,	-53
12.000,	-68,	14,	-33,	-30
17.000,	-41,	-19,	-45,	-17
22.000,	-48,	-17,	-27,	-46
27.000,	-45,	-39,	-43,	-49
32.000,	-42,	-31,	-39,	-39
37.000,	-51,	-26,	-63,	-26
42.000,	-47,	-35,	-45,	-45
47.000,	-45,	-38,	-38,	-49
52.000,	-46,	-24,	-12,	-63
57.000,	-37,	-30,	-18,	-51
62.000,	-53,	-30,	-37,	-34
67.000,	-15,	-9,	-33,	-3
72.000,	-38,	-39,	-70,	2
77.000,	-27,	-51,	-62,	-10
82.000,	-45,	-38,	-62,	-27
87.000,	-27,	-34,	-54,	-19
92.000,	-60,	-11,	-49,	-19
97.000,	-33,	-19,	-31,	-5
102.000,	-37,	-19,	-21,	-25

QUESTIONS

IC9607.DA = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 6+00, Offset 300' Downstream

IC9607 = HOLE NO.

4 = READING SET NO.

08/23/97 = DATE

10:08 = TIME

10., = STATISTICS INTERVAL
032-5 = INSTRUMENT NO.

0, = HALF OR COMPLETE SET OF DATA

.000, = A-ROTATION ERROR CORRECTION

.000, = B-ROTATION ERROR CORRECTION

0., = INSTRUMENT CONSTANT

Downstrea = A+ COMPASS DIRECTION

= A- COMPASS DIRECTION

= B+ COMPASS DIRECTION

= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONENT SHIFT

0, = B COMPONENT SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS, 36

Depth	A+	A-	B+	B-
2.000,	35,	-75,	-19,	-7
7.000,	6,	-73,	14,	-96
12.000,	-114,	37,	-62,	-29
17.000,	-90,	-61,	-82,	-61
22.000,	-10,	-54,	-8,	-67
27.000,	-58,	-36,	-66,	-33
32.000,	-27,	-9,	-39,	2
37.000,	-87,	2,	-23,	-64
42.000,	6,	-28,	-6,	-15
47.000,	-45,	-35,	-63,	-21
52.000,	-77,	-19,	-47,	-45
57.000,	-34,	-33,	-2,	-69
62.000,	-30,	-39,	-37,	-45
67.000,	-11,	-55,	-31,	-35
72.000,	14,	-64,	-21,	-31
77.000,	-17,	-57,	0,	-67
82.000,	-53,	-17,	5,	-83
87.000,	-156,	88,	-33,	-38
92.000,	71,	-145,	-92,	13
97.000,	-45,	-32,	9,	-86
102.000,	-15,	-58,	-24,	-37

107.000,	-49,	-23,	-43,	-33
112.000,	-47,	-49,	-69,	-33
117.000,	-39,	-39,	-58,	-27
122.000,	-10,	-79,	-65,	-17
127.000,	-15,	-42,	-27,	-34
132.000,	-35,	-41,	-26,	-52
137.000,	-61,	-7,	4,	-93
142.000,	-17,	0,	-1,	-20
147.000,	-35,	-15,	-48,	-5
152.000,	1,	-7,	-25,	30
157.000,	-31,	-31,	-51,	-20
162.000,	29,	-46,	-45,	42
167.000,	-29,	-30,	-26,	-58
172.000,	-50,	-40,	-50,	-21
177.000,	-38,	-55,	-55,	-28

Appendix C.2

Processed and Expanded Spiral Data

QUESTIONS

IC9601EX. = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 8+50, Offset 75'Downstream

IC9601 = HOLE NO.

5 = READING SET NO.

08/23/97 = DATE

07:46 = TIME

032-5 10., = STATISTICS INTERVAL
= INSTRUMEN NO.

1, = HALF OR COMPLETE SET OF DATA

.000, = A-ROTATION ERROR CORRECTION

.000, = B-ROTATION ERROR CORRECTION

3., = INSTRUMENT CONSTANT

DS = A+ COMPASS DIRECTION

= A- COMPASS DIRECTION

= B+ COMPASS DIRECTION

= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONEN SHIFT

0, = B COMPONEN SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS , 77

Depth

2.000,	-1,	0,	0,	0
4.000,	-5,	0,	0,	0
6.000,	-9,	0,	0,	0
8.000,	17,	0,	0,	0
10.000,	44,	0,	0,	0
12.000,	70,	0,	0,	0
14.000,	95,	0,	0,	0
16.000,	119,	0,	0,	0
18.000,	162,	0,	0,	0
20.000,	205,	0,	0,	0
22.000,	238,	0,	0,	0
24.000,	260,	0,	0,	0
26.000,	283,	0,	0,	0
28.000,	305,	0,	0,	0
30.000,	327,	0,	0,	0
32.000,	342,	0,	0,	0
34.000,	349,	0,	0,	0
36.000,	357,	0,	0,	0
38.000,	367,	0,	0,	0
40.000,	376,	0,	0,	0
42.000,	381,	0,	0,	0

44.000,	381,	0,	0,	0
46.000,	381,	0,	0,	0
48.000,	389,	0,	0,	0
50.000,	398,	0,	0,	0
52.000,	400,	0,	0,	0
54.000,	397,	0,	0,	0
56.000,	393,	0,	0,	0
58.000,	391,	0,	0,	0
60.000,	388,	0,	0,	0
62.000,	382,	0,	0,	0
64.000,	373,	0,	0,	0
66.000,	364,	0,	0,	0
68.000,	352,	0,	0,	0
70.000,	339,	0,	0,	0
72.000,	330,	0,	0,	0
74.000,	324,	0,	0,	0
76.000,	319,	0,	0,	0
78.000,	313,	0,	0,	0
80.000,	308,	0,	0,	0
82.000,	301,	0,	0,	0
84.000,	292,	0,	0,	0
86.000,	283,	0,	0,	0
88.000,	276,	0,	0,	0
90.000,	269,	0,	0,	0
92.000,	263,	0,	0,	0
94.000,	258,	0,	0,	0
96.000,	253,	0,	0,	0
98.000,	243,	0,	0,	0
100.000,	233,	0,	0,	0
102.000,	226,	0,	0,	0
104.000,	221,	0,	0,	0
106.000,	216,	0,	0,	0
108.000,	214,	0,	0,	0
110.000,	211,	0,	0,	0
112.000,	205,	0,	0,	0
114.000,	196,	0,	0,	0
116.000,	187,	0,	0,	0
118.000,	192,	0,	0,	0
120.000,	198,	0,	0,	0
122.000,	197,	0,	0,	0
124.000,	191,	0,	0,	0
126.000,	185,	0,	0,	0
128.000,	181,	0,	0,	0
130.000,	176,	0,	0,	0
132.000,	171,	0,	0,	0
134.000,	165,	0,	0,	0
136.000,	159,	0,	0,	0
138.000,	150,	0,	0,	0

140.000,	140,	0,	0,	0
142.000,	131,	0,	0,	0
144.000,	121,	0,	0,	0
146.000,	112,	0,	0,	0
148.000,	104,	0,	0,	0
150.000,	96,	0,	0,	0
152.000,	88,	0,	0,	0
154.000,	81,	0,	0,	0

QUESTIONS

IC9602EX. = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 6+00, Offset 75'Downstream

IC9602 = HOLE NO.

5 = READING SET NO.

08/23/97 = DATE

12:21 = TIME

032-5 = STATISTICS INTERVAL
= INSTRUMENT NO.1, = HALF OR COMPLETE SET OF DATA
.000, = A-ROTATION ERROR CORRECTION
.000, = B-ROTATION ERROR CORRECTION

3., = INSTRUMENT CONSTANT

Downstrea = A+ COMPASS DIRECTION
= A- COMPASS DIRECTION
= B+ COMPASS DIRECTION
= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONENT SHIFT
0, = B COMPONENT SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS, 129

Depth

2.000,	-1,	0,	0,	0
4.000,	-4,	0,	0,	0
6.000,	-8,	0,	0,	0
8.000,	-11,	0,	0,	0
10.000,	-14,	0,	0,	0
12.000,	-19,	0,	0,	0
14.000,	-24,	0,	0,	0
16.000,	-30,	0,	0,	0
18.000,	-31,	0,	0,	0
20.000,	-32,	0,	0,	0
22.000,	-37,	0,	0,	0
24.000,	-46,	0,	0,	0
26.000,	-55,	0,	0,	0
28.000,	-57,	0,	0,	0
30.000,	-58,	0,	0,	0
32.000,	-64,	0,	0,	0
34.000,	-75,	0,	0,	0
36.000,	-86,	0,	0,	0
38.000,	-91,	0,	0,	0
40.000,	-96,	0,	0,	0
42.000,	-104,	0,	0,	0

44.000,	-113,	0,	0,	0
46.000,	-122,	0,	0,	0
48.000,	-125,	0,	0,	0
50.000,	-129,	0,	0,	0
52.000,	-135,	0,	0,	0
54.000,	-143,	0,	0,	0
56.000,	-151,	0,	0,	0
58.000,	-154,	0,	0,	0
60.000,	-158,	0,	0,	0
62.000,	-162,	0,	0,	0
64.000,	-166,	0,	0,	0
66.000,	-170,	0,	0,	0
68.000,	-171,	0,	0,	0
70.000,	-173,	0,	0,	0
72.000,	-172,	0,	0,	0
74.000,	-170,	0,	0,	0
76.000,	-169,	0,	0,	0
78.000,	-172,	0,	0,	0
80.000,	-176,	0,	0,	0
82.000,	-182,	0,	0,	0
84.000,	-190,	0,	0,	0
86.000,	-198,	0,	0,	0
88.000,	-202,	0,	0,	0
90.000,	-206,	0,	0,	0
92.000,	-213,	0,	0,	0
94.000,	-222,	0,	0,	0
96.000,	-231,	0,	0,	0
98.000,	-238,	0,	0,	0
100.000,	-246,	0,	0,	0
102.000,	-251,	0,	0,	0
104.000,	-255,	0,	0,	0
106.000,	-258,	0,	0,	0
108.000,	-261,	0,	0,	0
110.000,	-264,	0,	0,	0
112.000,	-270,	0,	0,	0
114.000,	-279,	0,	0,	0
116.000,	-288,	0,	0,	0
118.000,	-292,	0,	0,	0
120.000,	-297,	0,	0,	0
122.000,	-302,	0,	0,	0
124.000,	-309,	0,	0,	0
126.000,	-316,	0,	0,	0
128.000,	-319,	0,	0,	0
130.000,	-322,	0,	0,	0
132.000,	-321,	0,	0,	0
134.000,	-317,	0,	0,	0
136.000,	-314,	0,	0,	0
138.000,	-316,	0,	0,	0

140.000,	-318,	0,	0,	0
142.000,	-318,	0,	0,	0
144.000,	-316,	0,	0,	0
146.000,	-314,	0,	0,	0
148.000,	-314,	0,	0,	0
150.000,	-314,	0,	0,	0
152.000,	-313,	0,	0,	0
154.000,	-309,	0,	0,	0
156.000,	-305,	0,	0,	0
158.000,	-306,	0,	0,	0
160.000,	-307,	0,	0,	0
162.000,	-309,	0,	0,	0
164.000,	-312,	0,	0,	0
166.000,	-316,	0,	0,	0
168.000,	-326,	0,	0,	0
170.000,	-336,	0,	0,	0
172.000,	-343,	0,	0,	0
174.000,	-348,	0,	0,	0
176.000,	-352,	0,	0,	0
178.000,	-353,	0,	0,	0
180.000,	-354,	0,	0,	0
182.000,	-350,	0,	0,	0
184.000,	-340,	0,	0,	0
186.000,	-331,	0,	0,	0
188.000,	-336,	0,	0,	0
190.000,	-341,	0,	0,	0
192.000,	-345,	0,	0,	0
194.000,	-348,	0,	0,	0
196.000,	-351,	0,	0,	0
198.000,	-348,	0,	0,	0
200.000,	-345,	0,	0,	0
202.000,	-340,	0,	0,	0
204.000,	-332,	0,	0,	0
206.000,	-324,	0,	0,	0
208.000,	-330,	0,	0,	0
210.000,	-337,	0,	0,	0
212.000,	-336,	0,	0,	0
214.000,	-325,	0,	0,	0
216.000,	-315,	0,	0,	0
218.000,	-315,	0,	0,	0
220.000,	-316,	0,	0,	0
222.000,	-314,	0,	0,	0
224.000,	-311,	0,	0,	0
226.000,	-307,	0,	0,	0
228.000,	-301,	0,	0,	0
230.000,	-294,	0,	0,	0
232.000,	-289,	0,	0,	0
234.000,	-285,	0,	0,	0

236.000,	-280,	0,	0,	0
238.000,	-282,	0,	0,	0
240.000,	-283,	0,	0,	0
242.000,	-285,	0,	0,	0
244.000,	-286,	0,	0,	0
246.000,	-287,	0,	0,	0
248.000,	-281,	0,	0,	0
250.000,	-276,	0,	0,	0
252.000,	-273,	0,	0,	0
254.000,	-271,	0,	0,	0
256.000,	-269,	0,	0,	0
258.000,	-267,	0,	0,	0

QUESTIONS

IC9603EX. = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 3+50, Offset 75'Downstream

IC9603 = HOLE NO.

6 = READING SET NO.
 08/23/97 = DATE
 11:37 = TIME
 10., = STATISTICS INTERVAL
 032-5 = INSTRUMENT NO.
 1, = HALF OR COMPLETE SET OF DATA
 .000, = A-ROTATION ERROR CORRECTION
 .000, = B-ROTATION ERROR CORRECTION
 4., = INSTRUMENT CONSTANT
 Downstrea = A+ COMPASS DIRECTION
 = A- COMPASS DIRECTION
 = B+ COMPASS DIRECTION
 = B- COMPASS DIRECTION
 0, = SHIFT ANALYSIS PRINT
 0, = A COMPONENT SHIFT
 0, = B COMPONENT SHIFT
 400., = CHANGE IN READING SCALE
 2., = DEFLECTION SCALE

READINGS, 67

Depth

2.000,	-1,	0,	0,	0
4.000,	-4,	0,	0,	0
6.000,	-7,	0,	0,	0
8.000,	-11,	0,	0,	0
10.000,	-14,	0,	0,	0
12.000,	-17,	0,	0,	0
14.000,	-20,	0,	0,	0
16.000,	-22,	0,	0,	0
18.000,	-18,	0,	0,	0
20.000,	-14,	0,	0,	0
22.000,	-14,	0,	0,	0
24.000,	-19,	0,	0,	0
26.000,	-24,	0,	0,	0
28.000,	-25,	0,	0,	0
30.000,	-26,	0,	0,	0
32.000,	-29,	0,	0,	0
34.000,	-33,	0,	0,	0
36.000,	-37,	0,	0,	0
38.000,	-30,	0,	0,	0
40.000,	-24,	0,	0,	0
42.000,	-24,	0,	0,	0

44.000,	-33,	0,	0,	0
46.000,	-41,	0,	0,	0
48.000,	-36,	0,	0,	0
50.000,	-31,	0,	0,	0
52.000,	-32,	0,	0,	0
54.000,	-40,	0,	0,	0
56.000,	-48,	0,	0,	0
58.000,	-40,	0,	0,	0
60.000,	-33,	0,	0,	0
62.000,	-32,	0,	0,	0
64.000,	-37,	0,	0,	0
66.000,	-43,	0,	0,	0
68.000,	-47,	0,	0,	0
70.000,	-50,	0,	0,	0
72.000,	-55,	0,	0,	0
74.000,	-61,	0,	0,	0
76.000,	-67,	0,	0,	0
78.000,	-65,	0,	0,	0
80.000,	-63,	0,	0,	0
82.000,	-67,	0,	0,	0
84.000,	-76,	0,	0,	0
86.000,	-85,	0,	0,	0
88.000,	-73,	0,	0,	0
90.000,	-62,	0,	0,	0
92.000,	-59,	0,	0,	0
94.000,	-63,	0,	0,	0
96.000,	-68,	0,	0,	0
98.000,	-63,	0,	0,	0
100.000,	-58,	0,	0,	0
102.000,	-56,	0,	0,	0
104.000,	-58,	0,	0,	0
106.000,	-61,	0,	0,	0
108.000,	-63,	0,	0,	0
110.000,	-65,	0,	0,	0
112.000,	-66,	0,	0,	0
114.000,	-67,	0,	0,	0
116.000,	-69,	0,	0,	0
118.000,	-67,	0,	0,	0
120.000,	-66,	0,	0,	0
122.000,	-68,	0,	0,	0
124.000,	-73,	0,	0,	0
126.000,	-79,	0,	0,	0
128.000,	-81,	0,	0,	0
130.000,	-84,	0,	0,	0
132.000,	-86,	0,	0,	0
134.000,	-87,	0,	0,	0

QUESTIONS

IC9604EX. = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 7+80, Offset 190' Downstream

IC9604 = HOLE NO.

5	=	READING SET NO.		
08/23/97	=	DATE		
08:53	=	TIME		
10.,	=	STATISTICS	INTERVAL	
032-5	=	INSTRUMENT	NO.	
1,	=	HALF OR COMPLETE SET OF DATA		
.000,	=	A-ROTATION	ERROR	CORRECTION
.000,	=	B-ROTATION	ERROR	CORRECTION
3.,	=	INSTRUMENT CONSTANT		
Downstrea	=	A+	COMPASS	DIRECTION
	=	A-	COMPASS	DIRECTION
	=	B+	COMPASS	DIRECTION
	=	B-	COMPASS	DIRECTION
0,	=	SHIFT ANALYSIS PRINT		
0,	=	A	COMPONENT	SHIFT
0,	=	B	COMPONENT	SHIFT
400.,	=	CHANGE IN READING SCALE		
2.,	=	DEFLECTION SCALE		

READINGS, 72

Depth

2.000,	-1,	0,	0,	0
4.000,	-5,	0,	0,	0
6.000,	-9,	0,	0,	0
8.000,	0,	0,	0,	0
10.000,	10,	0,	0,	0
12.000,	11,	0,	0,	0
14.000,	4,	0,	0,	0
16.000,	-3,	0,	0,	0
18.000,	9,	0,	0,	0
20.000,	23,	0,	0,	0
22.000,	26,	0,	0,	0
24.000,	19,	0,	0,	0
26.000,	12,	0,	0,	0
28.000,	18,	0,	0,	0
30.000,	24,	0,	0,	0
32.000,	22,	0,	0,	0
34.000,	14,	0,	0,	0
36.000,	5,	0,	0,	0
38.000,	7,	0,	0,	0
40.000,	8,	0,	0,	0
42.000,	5,	0,	0,	0

44.000,	-2,	0,	0,	0
46.000,	-10,	0,	0,	0
48.000,	-7,	0,	0,	0
50.000,	-5,	0,	0,	0
52.000,	-7,	0,	0,	0
54.000,	-14,	0,	0,	0
56.000,	-22,	0,	0,	0
58.000,	-13,	0,	0,	0
60.000,	-4,	0,	0,	0
62.000,	0,	0,	0,	0
64.000,	-1,	0,	0,	0
66.000,	-2,	0,	0,	0
68.000,	0,	0,	0,	0
70.000,	3,	0,	0,	0
72.000,	0,	0,	0,	0
74.000,	-7,	0,	0,	0
76.000,	-16,	0,	0,	0
78.000,	-15,	0,	0,	0
80.000,	-15,	0,	0,	0
82.000,	-17,	0,	0,	0
84.000,	-21,	0,	0,	0
86.000,	-25,	0,	0,	0
88.000,	-29,	0,	0,	0
90.000,	-32,	0,	0,	0
92.000,	-37,	0,	0,	0
94.000,	-42,	0,	0,	0
96.000,	-48,	0,	0,	0
98.000,	-51,	0,	0,	0
100.000,	-54,	0,	0,	0
102.000,	-60,	0,	0,	0
104.000,	-71,	0,	0,	0
106.000,	-81,	0,	0,	0
108.000,	-94,	0,	0,	0
110.000,	-106,	0,	0,	0
112.000,	-118,	0,	0,	0
114.000,	-131,	0,	0,	0
116.000,	-143,	0,	0,	0
118.000,	-140,	0,	0,	0
120.000,	-137,	0,	0,	0
122.000,	-138,	0,	0,	0
124.000,	-143,	0,	0,	0
126.000,	-148,	0,	0,	0
128.000,	-144,	0,	0,	0
130.000,	-141,	0,	0,	0
132.000,	-142,	0,	0,	0
134.000,	-148,	0,	0,	0
136.000,	-154,	0,	0,	0
138.000,	-152,	0,	0,	0

QUESTIONS

IC9605EX. = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 4+30, Offset 190' Downstream

IC9605 = HOLE NO.

5 = READING SET NO.

08/23/97 = DATE

10:55 = TIME

032-5 = STATISTICS INTERVAL
= INSTRUMENT NO.

1. = HALF OR COMPLETE SET OF DATA

.000, = A-ROTATION ERROR CORRECTION

.000, = B-ROTATION ERROR CORRECTION

3., = INSTRUMENT CONSTANT

Downstrea = A+ COMPASS DIRECTION

= A- COMPASS DIRECTION

= B+ COMPASS DIRECTION

= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONENT SHIFT

0, = B COMPONENT SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS, 67

Depth

2.000,	0,	0,	0,	0
4.000,	0,	0,	0,	0
6.000,	0,	0,	0,	0
8.000,	4,	0,	0,	0
10.000,	8,	0,	0,	0
12.000,	16,	0,	0,	0
14.000,	28,	0,	0,	0
16.000,	39,	0,	0,	0
18.000,	57,	0,	0,	0
20.000,	75,	0,	0,	0
22.000,	94,	0,	0,	0
24.000,	113,	0,	0,	0
26.000,	132,	0,	0,	0
28.000,	143,	0,	0,	0
30.000,	155,	0,	0,	0
32.000,	161,	0,	0,	0
34.000,	161,	0,	0,	0
36.000,	162,	0,	0,	0
38.000,	154,	0,	0,	0
40.000,	145,	0,	0,	0
42.000,	139,	0,	0,	0

44.000,	135,	0,	0,	0
46.000,	131,	0,	0,	0
48.000,	113,	0,	0,	0
50.000,	95,	0,	0,	0
52.000,	85,	0,	0,	0
54.000,	81,	0,	0,	0
56.000,	78,	0,	0,	0
58.000,	69,	0,	0,	0
60.000,	61,	0,	0,	0
62.000,	53,	0,	0,	0
64.000,	47,	0,	0,	0
66.000,	41,	0,	0,	0
68.000,	44,	0,	0,	0
70.000,	47,	0,	0,	0
72.000,	47,	0,	0,	0
74.000,	44,	0,	0,	0
76.000,	41,	0,	0,	0
78.000,	55,	0,	0,	0
80.000,	69,	0,	0,	0
82.000,	74,	0,	0,	0
84.000,	69,	0,	0,	0
86.000,	65,	0,	0,	0
88.000,	75,	0,	0,	0
90.000,	85,	0,	0,	0
92.000,	87,	0,	0,	0
94.000,	81,	0,	0,	0
96.000,	76,	0,	0,	0
98.000,	79,	0,	0,	0
100.000,	82,	0,	0,	0
102.000,	80,	0,	0,	0
104.000,	73,	0,	0,	0
106.000,	66,	0,	0,	0
108.000,	67,	0,	0,	0
110.000,	68,	0,	0,	0
112.000,	65,	0,	0,	0
114.000,	59,	0,	0,	0
116.000,	52,	0,	0,	0
118.000,	59,	0,	0,	0
120.000,	67,	0,	0,	0
122.000,	69,	0,	0,	0
124.000,	67,	0,	0,	0
126.000,	64,	0,	0,	0
128.000,	70,	0,	0,	0
130.000,	77,	0,	0,	0
132.000,	79,	0,	0,	0
134.000,	78,	0,	0,	0

QUESTIONS

IC9606EX. = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 7+80, Offset 300' Downstream

IC9606 = HOLE NO.

5 = READING SET NO.

08/23/97 = DATE

09:33 = TIME

10., = STATISTICS INTERVAL
032-5 = INSTRUMENT NO.

1, = HALF OR COMPLETE SET OF DATA

.000, = A-ROTATION ERROR CORRECTION

.000, = B-ROTATION ERROR CORRECTION

3., = INSTRUMENT CONSTANT

Downstrea = A+ COMPASS DIRECTION

= A- COMPASS DIRECTION

= B+ COMPASS DIRECTION

= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONENT SHIFT

0, = B COMPONENT SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS, 52

Depth

2.000,	0,	0,	0,	0
4.000,	-2,	0,	0,	0
6.000,	-3,	0,	0,	0
8.000,	-11,	0,	0,	0
10.000,	-19,	0,	0,	0
12.000,	-24,	0,	0,	0
14.000,	-27,	0,	0,	0
16.000,	-29,	0,	0,	0
18.000,	-32,	0,	0,	0
20.000,	-35,	0,	0,	0
22.000,	-39,	0,	0,	0
24.000,	-44,	0,	0,	0
26.000,	-48,	0,	0,	0
28.000,	-57,	0,	0,	0
30.000,	-65,	0,	0,	0
32.000,	-72,	0,	0,	0
34.000,	-78,	0,	0,	0
36.000,	-84,	0,	0,	0
38.000,	-91,	0,	0,	0
40.000,	-99,	0,	0,	0
42.000,	-107,	0,	0,	0

44.000,	-115,	0,	0,	0
46.000,	-123,	0,	0,	0
48.000,	-130,	0,	0,	0
50.000,	-138,	0,	0,	0
52.000,	-145,	0,	0,	0
54.000,	-150,	0,	0,	0
56.000,	-155,	0,	0,	0
58.000,	-160,	0,	0,	0
60.000,	-164,	0,	0,	0
62.000,	-169,	0,	0,	0
64.000,	-176,	0,	0,	0
66.000,	-182,	0,	0,	0
68.000,	-179,	0,	0,	0
70.000,	-175,	0,	0,	0
72.000,	-176,	0,	0,	0
74.000,	-182,	0,	0,	0
76.000,	-187,	0,	0,	0
78.000,	-193,	0,	0,	0
80.000,	-199,	0,	0,	0
82.000,	-206,	0,	0,	0
84.000,	-214,	0,	0,	0
86.000,	-222,	0,	0,	0
88.000,	-226,	0,	0,	0
90.000,	-230,	0,	0,	0
92.000,	-234,	0,	0,	0
94.000,	-239,	0,	0,	0
96.000,	-244,	0,	0,	0
98.000,	-243,	0,	0,	0
100.000,	-243,	0,	0,	0
102.000,	-243,	0,	0,	0
104.000,	-244,	0,	0,	0

QUESTIONS

IC9607EX. = DATA FILE NAME

BMTDAM = PROJECT NO

Sta. 6+00, Offset 300' Downstream

IC9607 = HOLE NO.

5 = READING SET NO.

08/23/97 = DATE

10:08 = TIME

032-5 = STATISTICS INTERVAL
= INSTRUMENT NO.

1, = HALF OR COMPLETE SET OF DATA

.000, = A-ROTATION ERROR CORRECTION

.000, = B-ROTATION ERROR CORRECTION

3., = INSTRUMENT CONSTANT

Downstrea = A+ COMPASS DIRECTION

= A- COMPASS DIRECTION

= B+ COMPASS DIRECTION

= B- COMPASS DIRECTION

0, = SHIFT ANALYSIS PRINT

0, = A COMPONENT SHIFT

0, = B COMPONENT SHIFT

400., = CHANGE IN READING SCALE

2., = DEFLECTION SCALE

READINGS, 91

Depth

2.000,	1,	0,	0,	0
4.000,	3,	0,	0,	0
6.000,	6,	0,	0,	0
8.000,	0,	0,	0,	0
10.000,	-4,	0,	0,	0
12.000,	-11,	0,	0,	0
14.000,	-19,	0,	0,	0
16.000,	-26,	0,	0,	0
18.000,	-46,	0,	0,	0
20.000,	-67,	0,	0,	0
22.000,	-79,	0,	0,	0
24.000,	-84,	0,	0,	0
26.000,	-89,	0,	0,	0
28.000,	-99,	0,	0,	0
30.000,	-109,	0,	0,	0
32.000,	-113,	0,	0,	0
34.000,	-111,	0,	0,	0
36.000,	-109,	0,	0,	0
38.000,	-117,	0,	0,	0
40.000,	-125,	0,	0,	0
42.000,	-127,	0,	0,	0

44.000,	-122,	0,	0,	0
46.000,	-117,	0,	0,	0
48.000,	-124,	0,	0,	0
50.000,	-131,	0,	0,	0
52.000,	-140,	0,	0,	0
54.000,	-149,	0,	0,	0
56.000,	-159,	0,	0,	0
58.000,	-163,	0,	0,	0
60.000,	-168,	0,	0,	0
62.000,	-173,	0,	0,	0
64.000,	-179,	0,	0,	0
66.000,	-185,	0,	0,	0
68.000,	-189,	0,	0,	0
70.000,	-193,	0,	0,	0
72.000,	-196,	0,	0,	0
74.000,	-197,	0,	0,	0
76.000,	-198,	0,	0,	0
78.000,	-202,	0,	0,	0
80.000,	-207,	0,	0,	0
82.000,	-213,	0,	0,	0
84.000,	-218,	0,	0,	0
86.000,	-224,	0,	0,	0
88.000,	-228,	0,	0,	0
90.000,	-233,	0,	0,	0
92.000,	-239,	0,	0,	0
94.000,	-245,	0,	0,	0
96.000,	-251,	0,	0,	0
98.000,	-257,	0,	0,	0
100.000,	-263,	0,	0,	0
102.000,	-268,	0,	0,	0
104.000,	-273,	0,	0,	0
106.000,	-277,	0,	0,	0
108.000,	-282,	0,	0,	0
110.000,	-288,	0,	0,	0
112.000,	-296,	0,	0,	0
114.000,	-307,	0,	0,	0
116.000,	-317,	0,	0,	0
118.000,	-324,	0,	0,	0
120.000,	-331,	0,	0,	0
122.000,	-339,	0,	0,	0
124.000,	-347,	0,	0,	0
126.000,	-355,	0,	0,	0
128.000,	-357,	0,	0,	0
130.000,	-360,	0,	0,	0
132.000,	-364,	0,	0,	0
134.000,	-371,	0,	0,	0
136.000,	-377,	0,	0,	0
138.000,	-383,	0,	0,	0

140.000,	-390,	0,	0,	0
142.000,	-390,	0,	0,	0
144.000,	-385,	0,	0,	0
146.000,	-380,	0,	0,	0
148.000,	-381,	0,	0,	0
150.000,	-382,	0,	0,	0
152.000,	-378,	0,	0,	0
154.000,	-369,	0,	0,	0
156.000,	-360,	0,	0,	0
158.000,	-364,	0,	0,	0
160.000,	-368,	0,	0,	0
162.000,	-366,	0,	0,	0
164.000,	-359,	0,	0,	0
166.000,	-352,	0,	0,	0
168.000,	-357,	0,	0,	0
170.000,	-362,	0,	0,	0
172.000,	-368,	0,	0,	0
174.000,	-375,	0,	0,	0
176.000,	-382,	0,	0,	0
178.000,	-390,	0,	0,	0
180.000,	-399,	0,	0,	0
182.000,	-407	0,	0,	0

APPENDIX D

Daily Field Reports with Inclinometer Monitoring Forms

FIELD OBSERVATION REPORTDate: Wed. Aug 20, 1997Report No.: 01Page 1 of 1GEI Project No.: 97486PROJECT: Ball Mountain Dam - Initial ReadingsCLIENT: New England Division - Corps of EngineersCONTRACTOR: Not ApplicableTIME OF ARRIVAL: 1630 hrsDEPARTURE: 1940 hrsWEATHER: Partly Sunny 80°**PERSONS CONTACTED/COMPANY****GEI REPRESENTATIVES**

Steve Sarandis

Greg Hart

OBSERVATIONS

1. **Purpose of Site Visit:** To obtain the initial readings of the seven new inclinometers installed at Ball Mountian Dam in Jamaica, Vermont.
2. The first task we performed upon arriving on-site was to remove the threaded protective casings at each inclinometer location and mark the A0 grooves on the outside of the inclinometer casing. At the location of inclinometer IC-96-3 the casing grooves were aligned almost 45 degrees out of alignment. We selected the A0 grooves as the grooves that pointed downstream and away from the left abutment and towards the center of the West River valley.
3. We obtained the first set of readings on inclinometer IC-96-3. We were able to transport all the equipment to the location of IC-96-3 by hand in one trip. We used a exterior frame backpack to transport the 320 feet of inclinometer. We carried the inclinometer probe and Datamate readout box by hand.

By: STEVE SARANDISReviewed: Alt P.D.

FIELD OBSERVATION REPORT

Date: Thurs Aug 21, 1997
Report No.: 02
Page 1 of 1
GEI Project No.: 97486

PROJECT: Ball Mountain Dam - Initial Readings

CLIENT: New England Division - Corps of Engineers

CONTRACTOR: Not Applicable

TIME OF ARRIVAL: 0720 hrs

DEPARTURE: 1700 hrs

WEATHER: Steady Rain, 60°s

PERSONS CONTACTED/COMPANY**GEI REPRESENTATIVES**

Steve Sarandis
Greg Hart

OBSERVATIONS

1. Purpose of Site Visit: To obtain the initial readings of the seven new inclinometers installed at Ball Mountian Dam in Jamaica, Vermont.
2. We obtained the initial readings on inclinometers IC-96-1, IC-96-2 and IC-96-3 today. Initial readings consisted of three complete reading sets of each inclinometer. A complete reading set consisted of one pass with the inclinometer probes upper wheels in the A0 grooves and one pass with probes upper wheels in the A180 grooves. Inclinometer monitoring reports for each inclinometer read today are attached.
3. Because the inclinometer casing at location IC-96-3 was improperly aligned we obtained an additional set of readings with inclinometer probes wheels in the B0 and B180 grooves.

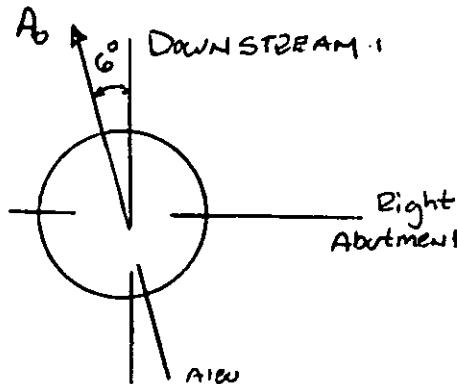
By: STEVE SARANDIS

Reviewed: Alt Ph J

INCLINOMETER MONITORING FORM

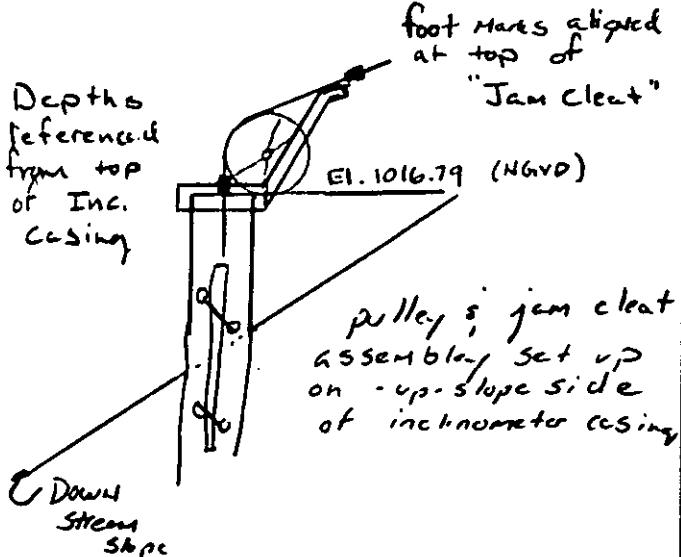
PROJECT	Ball Mountain Dam	PROJECT NO.	97486
LOCATION	Slope Inclinometer Program	INCLINOMETER NO.	JC-96-1
CLIENT	Jamaica, Vermont	INSTRUMENT NO.	
READ BY	Corps of Engineers - New England Division	PROBE	27747B
DATE	Steve Scrandis / Greg Hart	READOUT BOX	9680
WEATHER	Thursday Aug 21, 1997	TIME:	
	Overscast, light rain, ~65°F	START	12 20 hrs.
		FINNISH	1430 hrs.

SKETCH A-A GROOVES



CREST OF DAM

SKETCH REFERENCE POINT



DESCRIBE THE REFERENCE POINT FOR DEPTH MEASUREMENTS: For each reading the foot marker one foot above a line aligned at the top of the jam cleat. The reading depth was referenced from the top of the PVC inclinometer casing.

DEPTH FROM THE REFERENCE POINT WITH THE INCLINOMETER PROBE RESTING ON THE BOTTOM OF THE CASING: With Probe on bottom depth from top of the inclinometer casing was 155.95'

LENGTH OF "PULL UP" FROM BOTTOM OF THE HOLE TO REACH FIRST READING DEPTH: 1.95'

Bottom

FIRST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
154	- 142	- 198	- 2425	2334

Top

LAST READING INFORMATION:

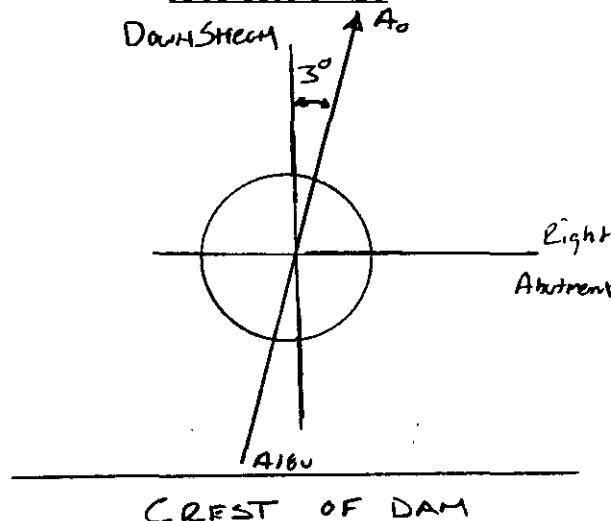
DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
2	- 891	826	- 83	3

NOTES: 1. This is initial set of readings. Three sets of readings were taken. First & last reading information is presented for data set #2.

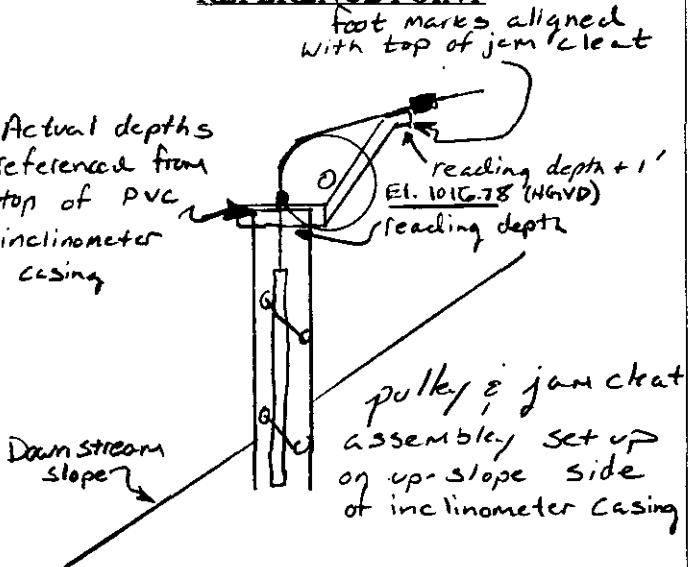
INCLINOMETER MONITORING FORM

PROJECT	Ball Mountain Dam		PROJECT NO.	97486
LOCATION	Slope Inclinometer Program		INCLINOMETER NO.	IC-96-2
CLIENT	Jamaica, Vermont		INSTRUMENT NO.	
READ BY	Corps of Engineers - New England Division		PROBE	27747B
DATE	Steve Sarandis / Greg Hart		READOUT BOX	9680
WEATHER	Thursday Aug. 21, 1997		TIME:	
			START	0800 hrs.
			FINNISH	1130 hrs.

**SKETCH
A-A GROOVES**



**SKETCH
REFERENCE POINT**



DESCRIBE THE REFERENCE POINT FOR DEPTH MEASUREMENTS:

For each reading the foot marker one foot higher than the reading depth was aligned at the top of the jam cleat. Actual depths were referenced from the top of the PVC inclinometer casing. (i.e. for the 100' reading, the 101' mark was aligned with the jam cleat)

DEPTH FROM THE REFERENCE POINT WITH THE INCLINOMETER PROBE RESTING ON THE BOTTOM

OF THE CASING: Probe on bottom - depth from PVC Casing was 258.9'

LENGTH OF "PULL UP" FROM BOTTOM OF THE HOLE TO REACH FIRST READING DEPTH:

0.9'

Bottom

FIRST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
258'	1677	-1743	-1208	1114

Top

LAST READING INFORMATION:

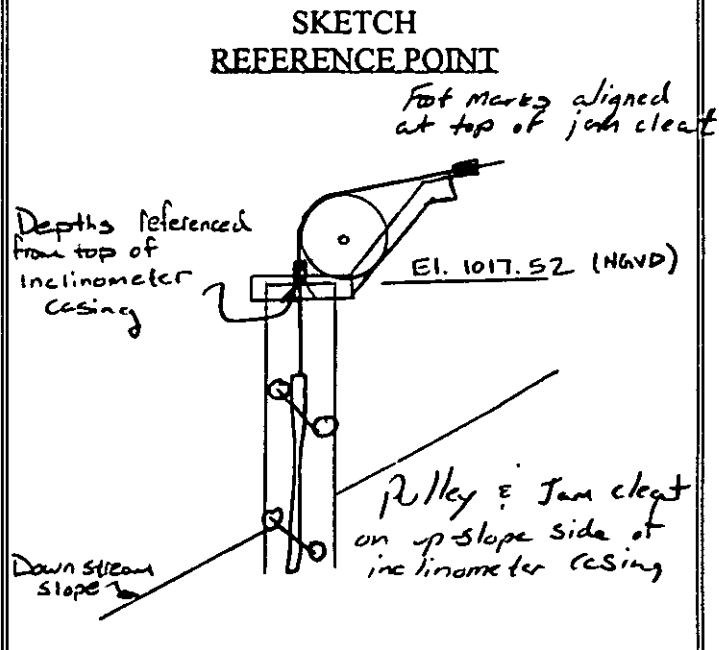
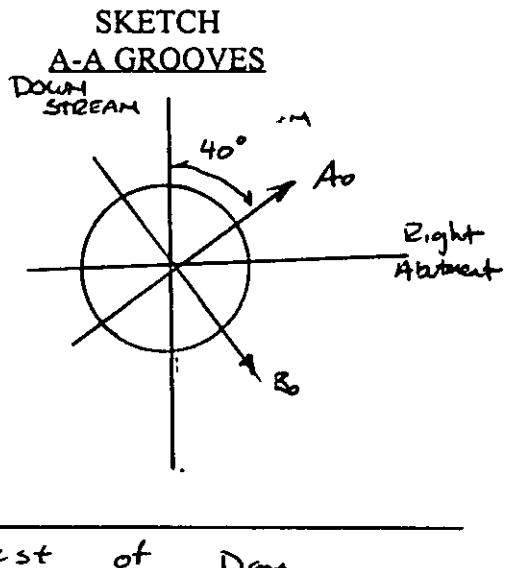
DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
2'	342	-400	309	-399

NOTES:

- These are the initial readings - Three sets of readings were taken successively. Reading information for the first & last reading are from date set #3.

INCLINOMETER MONITORING FORM

PROJECT	Ball Mountain Dam Slope Inclinometer Program	PROJECT NO.	97486 <u>IC-96-3</u>
LOCATION	Jamaica, Vermont	INCLINOMETER NO.	
CLIENT	Corps of Engineers - New England Division	INSTRUMENT NO.	
READ BY	<u>Steve Sarandis / Greg Hart</u>	PROBE	<u>277473</u>
DATE	<u>Thursday Aug 21, 1997</u>	READOUT BOX	<u>9680</u>
WEATHER	<u>Overcast light rain 65°F</u>	TIME:	
		START	<u>1445 hrs</u>
		FINNISH	<u>1700 hrs</u>



DESCRIBE THE REFERENCE POINT FOR DEPTH MEASUREMENTS: To take a reading - the foot marker one foot higher than the reading depth was aligned at the top of the jam cleat. Actual depths were referenced from the top of the inclinometer casing.

DEPTH FROM THE REFERENCE POINT WITH THE INCLINOMETER PROBE RESTING ON THE BOTTOM OF THE CASING: Probe on bottom - depth from top of Casing - 134.95'

LENGTH OF "PULL UP" FROM BOTTOM OF THE HOLE TO REACH FIRST READING DEPTH: .95'

Bottom

FIRST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
134	-239	184	-1895	1805

Top

LAST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
2	-545	490	-395	305

NOTES:

1. Initial set of readings - Three sets of readings were taken in raw. Top & bottom reading depth information from data set #2
2. Lower 10' of cable and probe are wet when removed from Inc. casing.

FIELD OBSERVATION REPORTDate: Fri. Aug 22, 1997Report No.: 03Page 1 of 1GEI Project No.: 97486PROJECT: Ball Mountain Dam - Initial ReadingsCLIENT: New England Division - Corps of EngineersCONTRACTOR: Not ApplicableTIME OF ARRIVAL: 0645 hrsDEPARTURE: 1530 hrsWEATHER: Overcast, foggy, 60° s**PERSONS CONTACTED/COMPANY**

Phil Morrison/Corps of Engineers

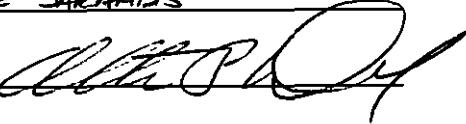
GEI REPRESENTATIVES

Steve Sarandis

Greg Hart

OBSERVATIONS

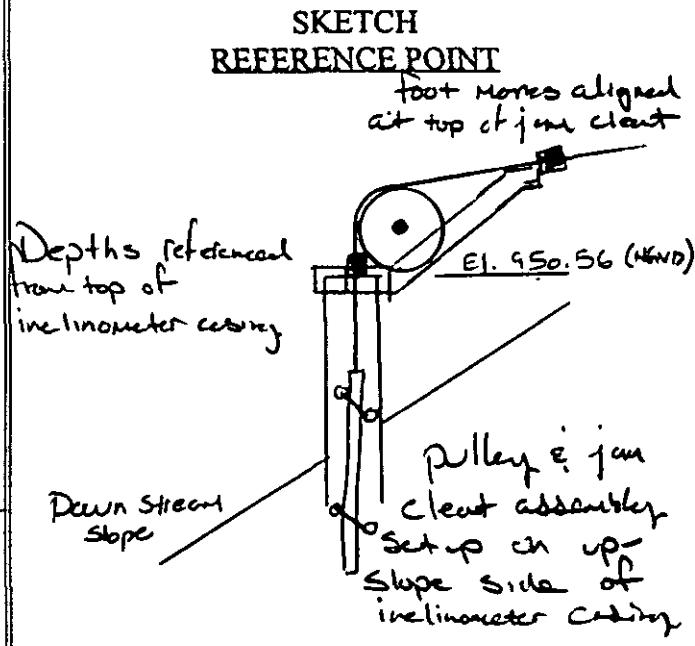
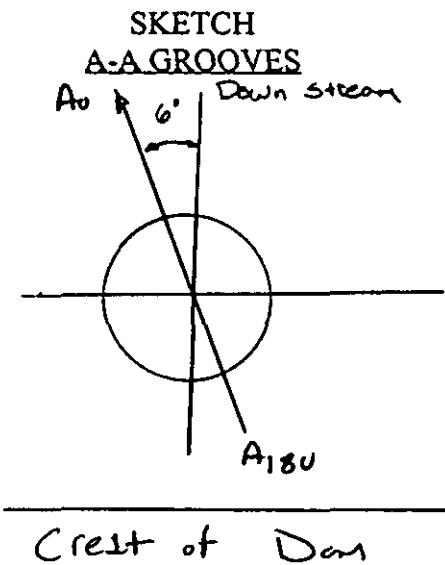
1. **Purpose of Site Visit:** To obtain the initial readings of the seven new inclinometers installed at Ball Mountian Dam in Jamaica, Vermont.
2. We obtained the initial readings on inclinometers IC-96-4, IC-96-5, Ic -96-6 and IC-96-7 today. Initial readings consisted of three complete reading sets of each inclinometer. A complete reading set consisted of one pass with the inclinometer probes upper wheels in the A0 grooves and one pass with probes upper wheels in the A180 grooves. Inclinometer Monitoring reports for the inclinometers read today are attached.
3. The spiral probe was delivered to the site today. We returned to the motel in the afternoon and used the calibration blocks to measure the zero offsets of the spiral probe. Data sheet with zero offset calculations is attached.

By: STEVE SARANDISReviewed: 

INCLINOMETER MONITORING FORM

PROJECT Ball Mountain Dam
 LOCATION Slope Inclinometer Program
 CLIENT Jamaica, Vermont
 READ BY Corps of Engineers - New England Division
 DATE Steve Sarandis / Greg Hart
 WEATHER Friday August 22, 1997
 Overcast 70°F

PROJECT NO. 97486
 INCLINOMETER NO. IC-96-1
 INSTRUMENT NO.
 PROBE 277473
 READOUT BOX 9680
 TIME:
 START 1030 hrs
 FINISH 1220 hrs



DESCRIBE THE REFERENCE POINT FOR DEPTH MEASUREMENTS: To take a reading - the foot marker - the foot above the reading depth was aligned at the top of the cleat. Actual reading depths are referenced from the top of the casing.

DEPTH FROM THE REFERENCE POINT WITH THE INCLINOMETER PROBE RESTING ON THE BOTTOM OF THE CASING: Probe on bottom - depth to top of casing is 145.9'

LENGTH OF "PULL UP" FROM BOTTOM OF THE HOLE TO REACH FIRST READING DEPTH: 1.9'

Bottom

FIRST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
144	69	-126	376	-478

Top

LAST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
2'	849	-911	471	-568

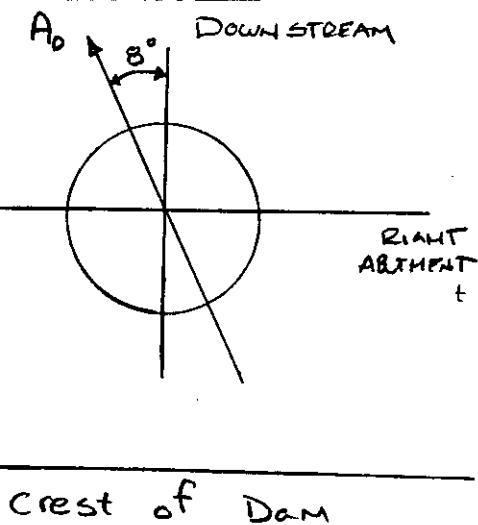
NOTES:

- Initial set of readings. Three sets of readings were taken. Bottom & top reading information is presented for data set #2.
- lower 9' of cable & probe are wet when removed from inc. casing.

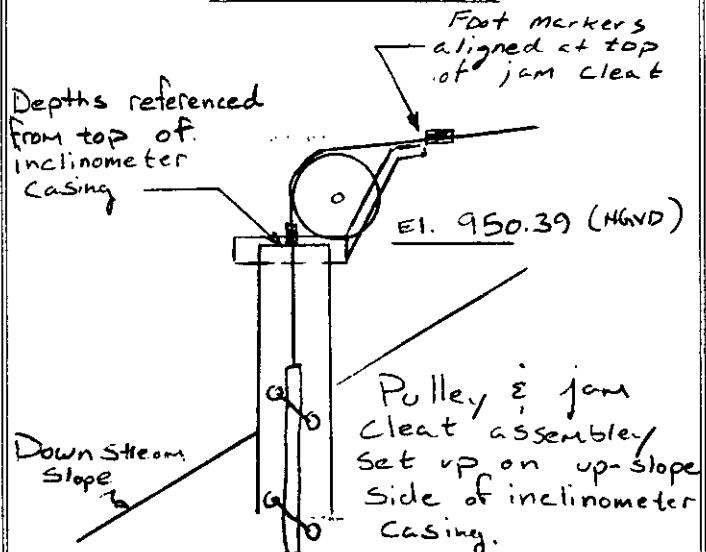
INCLINOMETER MONITORING FORM

PROJECT	Ball Mountain Dam		PROJECT NO.	97486
LOCATION	Slope Inclinometer Program		INCLINOMETER NO.	IC-96-5
CLIENT	Jamaica, Vermont		INSTRUMENT NO.	
READ BY	Corps of Engineers - New England Division		PROBE	27747B
DATE	Steve Sarandis / Greg Hart		READOUT BOX	9680
WEATHER	Friday August 22, 1997		TIME:	
	Overcast 70°F		START	1300 hrs
			FINNISH	1500 hrs

SKETCH A-A GROOVES



SKETCH REFERENCE POINT



DESCRIBE THE REFERENCE POINT FOR DEPTH MEASUREMENTS: To take a reading, the foot marker one foot above the reading depth was aligned at the top of the jam cleat. Actual reading depths are referenced from the top of the inclinometer casing.

DEPTH FROM THE REFERENCE POINT WITH THE INCLINOMETER PROBE RESTING ON THE BOTTOM OF THE CASING: Probe on Bottom - depth to top of casing 135.15'

LENGTH OF "PULL UP" FROM BOTTOM OF THE HOLE TO REACH FIRST READING DEPTH: 1.95'

Bottom

FIRST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
134'	415	- 474	- 1135	1048

Top

LAST READING INFORMATION:

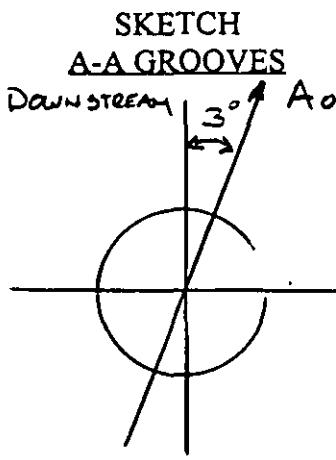
DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
2'	- 199	136	197	- 286

NOTES: 1. This is the initial set of readings. Three sets of readings were taken for the initial readings. Top = bottom depth reading depth information is from data set #2.
2. The lower 28' of cable & probe are wet when removed from inc. casing.

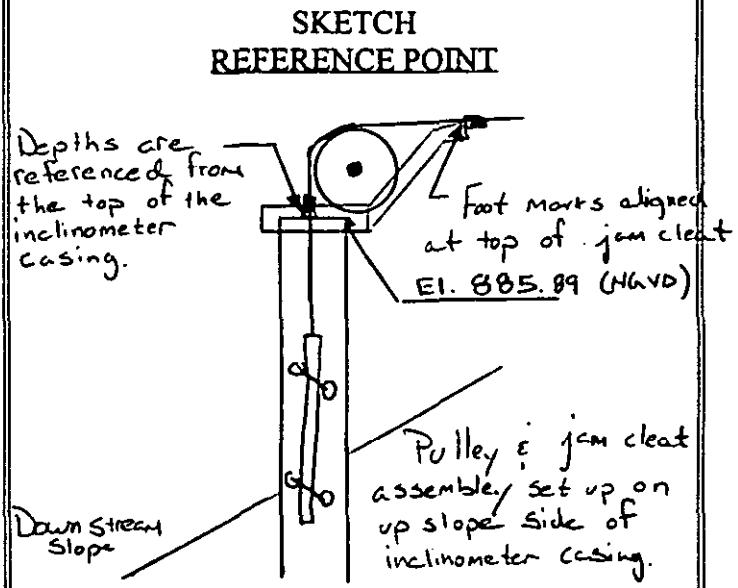
INCLINOMETER MONITORING FORM

PROJECT Ball Mountain Dam
 LOCATION Slope Inclinometer Program
 CLIENT Jamaica, Vermont
 READ BY Corps of Engineers - New England Division
 DATE S. Sarandis / Sam Hart
 Friday, August 28, 1997
 WEATHER Overcast ~ 70°F

PROJECT NO.	97486
INCLINOMETER NO.	IC-96-6
INSTRUMENT NO.	
PROBE	17747B
READOUT BOX	9680
TIME:	
START	0910 hrs
FINISH	1020 hrs



Crest of Dam



Down Stream Slope

DESCRIBE THE REFERENCE POINT FOR DEPTH MEASUREMENTS: To take a reading the foot marker one foot above the reading depth was aligned at the top of the jam cleat. Actual reading depths are referenced from the top of the inclinometer casing.

DEPTH FROM THE REFERENCE POINT WITH THE INCLINOMETER PROBE RESTING ON THE BOTTOM OF THE CASING: Probe on bottom - depth from top of Casing is 105

LENGTH OF "PULL UP" FROM BOTTOM OF THE HOLE TO REACH FIRST READING DEPTH: 1'

Bottom

FIRST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
104'	1174	-1236	-811	721

Top

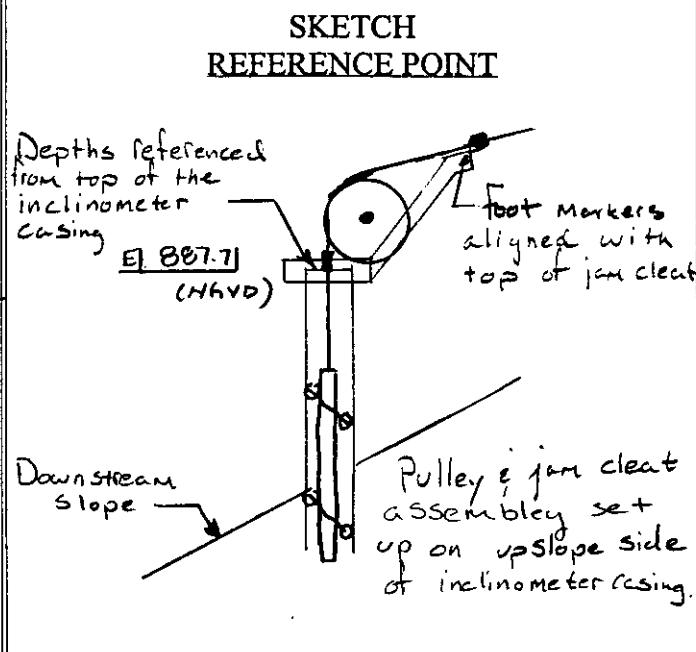
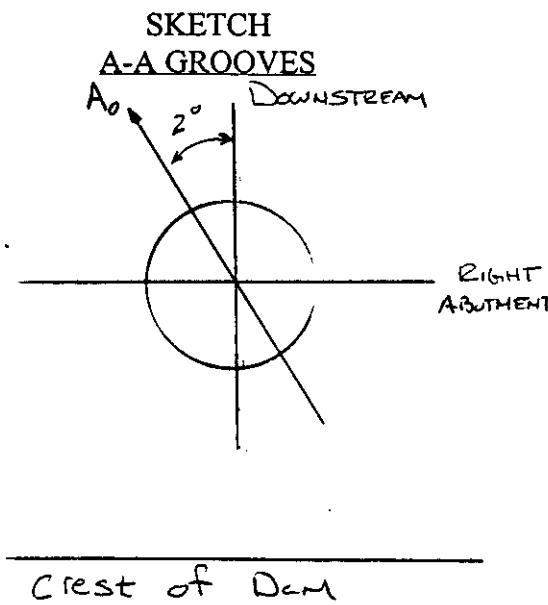
LAST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
2'	358	-426	-117	14

NOTES: 1. This is initial set of readings. Three sets of readings were taken as part of the initial set of readings. Bottom & top reading information is from data set #3.
 2. The lower 25' of cable & probe are wet when removed from the inc. casing.

INCLINOMETER MONITORING FORM

PROJECT	Ball Mountain Dam	PROJECT NO.	97486
LOCATION	Slope Inclinometer Program	INCLINOMETER NO.	IC-96-7
CLIENT	Jamaica, Vermont	INSTRUMENT NO.	
READ BY	Corps of Engineers - New England Division	PROBE	277473
DATE	Steve Scandis / Greg Hart	READOUT BOX	968D
WEATHER	Friday August 22, 1977	TIME:	
	Overcast 70°F	START	0720 hrs
		FINNISH	0910 hrs



DESCRIBE THE REFERENCE POINT FOR DEPTH MEASUREMENTS: To take a reading, the foot marker one foot above the reading depth was aligned with top of the jam cleat. The actual reading depth was referenced from the top of the inclinometer casing.

DEPTH FROM THE REFERENCE POINT WITH THE INCLINOMETER PROBE RESTING ON THE BOTTOM OF THE CASING: Probe in bottom - depth from top of casing is 183.0'

LENGTH OF "PULL UP" FROM BOTTOM OF THE HOLE TO REACH FIRST READING DEPTH: 1.0'

Bottom

FIRST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
182.0	-77	15	-397	321

Top

LAST READING INFORMATION:

DEPTH	A-0 READING	A-180 READING	B-0 READING	B-180 READING
2.0	25	-92	-739	651

NOTES: 1. This is the initial set of readings. Three sets of readings were taken for the initial reading set. Top & Bottom reading information is from data set #3.

2. Lower 90' of cable & probe were wet when removed from inc. casing.

FIELD OBSERVATION REPORT

Date: Sat. Aug 23, 1997

Report No.: 04

Page 1 of 1

GEI Project No.: 97486

PROJECT: Ball Mountain Dam - Initial Readings

CLIENT: New England Division - Corps of Engineers

CONTRACTOR: Not Applicable

TIME OF ARRIVAL: 0710 hrs

DEPARTURE: 1400 hrs

WEATHER: Partly Sunny, 70° s

PERSONS CONTACTED/COMPANY

GEI REPRESENTATIVES

Steve Sarandis

Greg Hart

OBSERVATIONS

1. **Purpose of Site Visit:** To obtain the initial readings of the seven new inclinometers installed at Ball Mountian Dam in Jamaica, Vermont.
2. We obtained the spiral readings for all seven of the inclinometers casings today. We obtained four sets of readings for each inlcinometer casing. We obtained a set of readings with the spiral probe in each of the four sets of grooves (A0,A180,B0,B180) of each inclinometer casing.

By: STEVE SARANDIS

Reviewed: Mr. Hart



GEI Consultants, Inc.

Project 97480 Page 1 of 1

Client NEW England Division - Corps of Engineers

Date 8-22-97 By Greg Herr

Subject Ball Mountain Dam

Checked 8-28-97 By Steve Sorenson

Spiral sensor offset correction

Approved 8/24/97 By APD

0°

Bottom most wheel

- 1) -25
- 2) -26
- 3) -25 - 128
- 4) -26
- 5) -26

180°

Other lower wheel

- 1) -14
- 2) -15
- 3) -15 - 74
- 4) -15
- 5) -15

Other lower wheel

- 1) -31
- 2) -32
- 3) -33 - 161
- 4) -33
- 5) -32

Bottom most wheel

- 1) -18
- 2) -18
- 3) -18 - 92
- 4) -19
- 5) -19

Avg = 28.9

Avg = 16.6

$$\text{Zero offset} = \frac{28.9 + 16.6}{2}$$

$$= 22.75$$

APPENDIX E

Weekly Safety Meeting Reports

Report No. 1
Delivery Order No. 0008
GEI Project 97486
Page 1 of 1

GEI CONSULTANTS, INC.

**WEEKLY SAFETY MEETING
BALL MOUNTAIN DAM**

To: Safety Office, NAE

From: Field Engineer

Thru: Project Manager

Contract No. DACW 33-95-D-0008

1. Exposure: Total on-site exposure hours for week ending August 23, 1997.

GEI
Stephen Sarandis 38.0 man-hours
Gregory Hart 38.0 man-hours

2. Forwarded: NED, Waltham, MA

Signature

Stephen J. Sarandis
GEI Project Manager